MAY 24 1926

PAPER TRADE JOURNAL

Vol. LXXXII, No. 20 MAY 20, 1926 Per annum, $4.00 Per copy, 10 cents

Why Outstanding Mills Prefer the BELOIT

WHO can say that the judgment of long experience is not, after all, the soundest? For over four years now some remarkable performances in paper making have been established by the users of the NEW BELOIT FOURDRINIER. These "Beloit" users are enthusiastic in their praise of the Removable, Adjustable and Shakeable "Beloit" features, to which they attribute increased quality production, longer wire life, and tremendous savings in time, labor and money.

Let this Actual Testimony Convince You, Too:

PROUD OF THEIR "BELOIT"

"We are running steadily—the, most of all, to the running quality of the splendid machine furnished by you. We are proud of our 'Beloit' machine."

1000 FEET PER MINUTE

"We are running steadily and making high grade paper at one thousand feet per minute. We are proud of our 'Beloit' machine."

FROM THE COAST

"It is generally conceded by all the best paper mill men on the Coast here that the 'Beloit' machine is by far superior to any paper machine on the coast."

RECORD PRODUCTION

"We certainly want to congratulate you on this production. This is, as far as the writer knows, a record production for a high-speed news machine."

BEST HE HAS SEEN

"The fourdrinier end of the machine is about the best-looking proposition the writer has ever seen. You have made a great many improvements over anything we are used to seeing."

SMOOTH RUNNING

"I had the pleasure of seeing your machines in operation. Words fail me in which to express my admiration at such a smooth-running machine."

EXCEEDED OUR FONDEST HOPES

"After two years of operation the average life of our wires is about 3½ months, which proves that all the improvements on our machine, i.e. oscillating suction boxes, removable Fourdrinier, arrangement of wire rolls, etc., together with excellent workmanship, give results which exceed our fondest hopes."

RECORD AS A MONEY EARNER

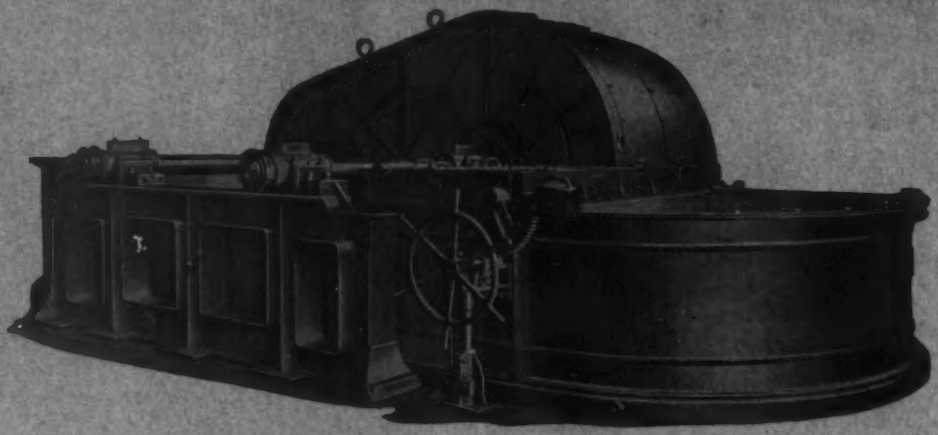
"————holds the best record as a money-earner of any machine in the United States on like products—which has been reached by the management of some of the best men in the country."

Send now for Bulletin No. 9. No obligation

The NEW BELOIT FOURDRINIER

BELOIT IRON WORKS — Beloit, Wisconsin, U. S. A.

Some Interesting Facts Concerning the Noble & Wood Pulping Engine



The following are a few of the results which have been determined by actual test:

Domestic Kraft pulp laps, 45% dry, fed into 1200 lb. pulper through chute from overhead, treated for beater and dumped within ten minutes. On thoroughly dry foreign Kraft, total time elapsed was 21 minutes.

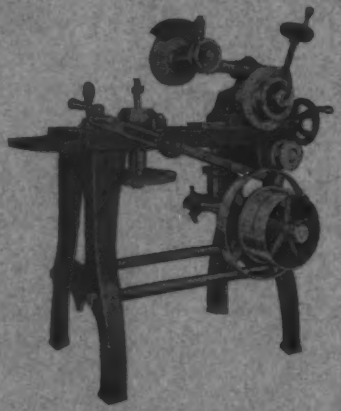
On straight wood pulp furnish, 80% groundwood, 20% sulphite, a 1200 lb. engine thoroughly pulped the stock, ready for jordans, in 20 to 30 minutes.

Many other equally good records are available upon request.

Our booklet "CUTTING PRODUCTION COSTS WITH THE PAPER PULPING ENGINE" carries a full history of the development of the pulper. Write for a copy.

THE NOBLE & WOOD MACHINE CO., Hoosick Falls, N. Y.

Most Every Paper Mill Has Koegel Equipment



THE STANDARD
Capacity—8½-inch Diam. Slitters

Specifications: Floor space, 27" x 42"; speed of spindle, 55 revolutions; driving pulley, 9"x2½"—speed, 400 revolutions; emery wheel, 7"x½"—speed, 3,000 revolutions; weight, about 425 lbs.

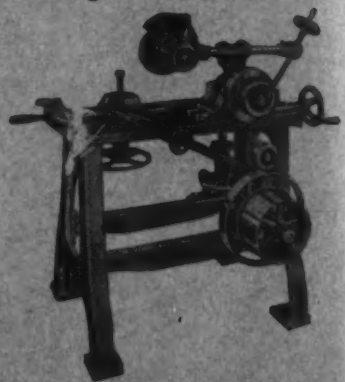
Over 800

Standard Koegel Patent Universal Slitter and Circular Knife Grinders are in the paper and pulp mills of the United States and Canada. What greater evidence could be offered for the universal service this grinder renders?

For Greater Capacity

The Koegel No. 4 Patent Universal Slitter and Circular Knife Grinder is built for Slitters up to 16" in diameter. In mills where larger diameter knives and slitters are used, 150 are in service.

Here are the specifications: Floor space, 32"x52"; speed of spindle, 55 revolutions; driving pulley, 10"x2½"—speed, 400 revolutions; emery wheel, 8"x½"—speed, 3,000 revolutions; weight, about 525 lbs.



THE KOEGEL No. 4
Capacity—16-inch Diam. Slitters

CHAS. KOEGEL'S SONS, Inc.

Slitters and Specialties

HOLYOKE MASSACHUSETTS

Entered as second class matter August 13, 1925, at the Post Office at East Stroudsburg, Pa., under Act of Congress of March 3, 1879. ESTABLISHED 1872 FIFTY-FOURTH YEAR Published every Thursday by the Lockwood Trade Journal Co., at 24 N. Crystal St., E. Stroudsburg, Pa. EXECUTIVE AND EDITORIAL OFFICES: 10 EAST 39th STREET, NEW YORK CITY. CHICAGO: 123 West Madison St., Chicago, Ill.

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The Magazine of the Paper Industry

Paper Men Working for Stream Purification

Norman W. Wilson, President of the American Paper and Pulp Association, Names Committee of Manufacturers From Many States as a National Stream Purification Committee for the Pulp and Paper Industry—Dr. Baker Explains Interest of Paper Manufacturers in Problem of Pure Water

Indicative of the interest of the paper industry of the United States in the steps being taken in many states for the purification of the streams, President Norman W. Wilson of the American Paper and Pulp Association has named a committee of manufacturers in many states as a National Stream Purification Committee for the Pulp and Paper Industry:

Harry E. Fletcher, Chairman, Fletcher Paper Company, Alpena, Mich.

Felix Pagenstecher, Bryant Paper Company, Kalamazoo, Mich.

Ernst Mahler, Kimberly-Clark Company, Neenah, Wis.

Guy Waldo, Flambeau Company, Park Falls, Wis.

C. M. Baker, Chief Engineer, State Board of Health of Wisconsin, Madison, Wis.

H. P. Carruth, Mead Pulp and Paper Company, Chillicothe, Ohio.

Minor M. Beckett, Beckett Paper Company, Hamilton, Ohio.

F. H. Waring, State Board of Health, Columbus, Ohio.

Geo. K. Spence, New York Pennsylvania Company, Johnsonburg, Pa.

F. P. Klund, Hammermill Paper Company, Erie, Pa.

W. L. Stevenson, Chief Engineer, Sanitary Water Board of Pennsylvania, Harrisburg, Pa.

Geo. E. Williamson, Strathmore Paper Co., Mittineague, Mass.

S. B. Copeland, Eastern Mfg. Company, Bangor, Maine.

Abel Wolman, Chief Engineer, Department of Health, State of Maryland, Baltimore, Md.

Edward D. Rich, Director, Bureau of Engineering, Michigan Department of Health, Lansing, Mich.

W. G. MacNaughton, Technical Association of the Pulp and Paper Industry, New York City.

Dr. Baker Explains Problems

In announcing the appointment of this Committee, Dr. Hugh P. Baker, Executive Secretary of the Association, explains the interest of the paper manufacturers in the problem of pure water by saying:

"In no other industry in the United States is so much water used in the manufacture of the product as in paper. The use of water for power in the paper industry is very large, particularly in mills manufacturing pulp to be used in news print paper. However, water for power is not nearly as essential in the paper dustry as plenty of good pure water to be used in the manufacture of the paper industry itself. More than 7,000 gallons of chemically purified and filtered water must be available for the manufacture of every 100 pounds of paper.

Growing Sentiment to Preserve Purity of Streams

"As with other industries dependent upon water for both power and for use in manufacture, pulp and paper mills have been located, since the manufacture of paper began in the country, along streams and water courses where water in great volume could be taken in to the mill, used in manufacture, and turned back into the streams. Because of the fact that the water as used is turned back into streams, and because this spent water sometimes contains small particles of wood pulp or other impurities from the mill, there has been a growing sentiment not only in the industry itself, but on the part of those interested in the fish and plant life of the streams, in practical means of maintaining the purity of streams and rivers.

"The problem of turning the water from the mills back into the streams in as clean condition as it entered the mill is not as easy of solution as may be thought by those whose only interest may be the use of streams for fishing or other recreational purposes. Often communities have offered special inducements to mills to locate in their midst and these mills have been developed at large outlay of capital and employ many workers. Often too, along with the waste from pulp and paper mills, has been the turning into the streams of sewage from villages and cities and waste from other manufacturing plants. With all of the studies that have been made of the effect of the turning of waste into streams and rivers, there is as yet but incomplete information as to the effect of disposal of waste in streams where the amount of water and rapidity of flow varies greatly from season to season. Many of the mills in the industry in seeking to prevent economic waste of raw materials, have put in equipment that has cut the amount of waste discharged in the streams to a minimum and have found the effort a profitable one.

Cooperation Needed

"To co-ordinate studies of waste disposal in the industry and to co-operate effectively with state agencies working for purification of rivers and streams, the industry has been seeking a means of more effective action both through the Technical Association of the Pulp and Paper Industry, and through scientific agencies outside the industry. We believe that the problem can be met most effectively through co-operation."

To Repay Excess Duty on Wrapping Paper

[FROM OUR REGULAR CORRESPONDENT]

WASHINGTON, D. C., May 19, 1926.—The Finance Committee of the Senate has favorably reported the bill to pay the Capital Paper Company, of Indianapolis $706.87 which was paid by that company in 1924 as excess duties on wrapping paper imported into the United States. The bill has been approved by the Secretary of the Treasury.

Speculation Regarding Future of News Print

J. H. Price of Price Bros. & Co. Says Enormous Expansion of the Industry That is Taking Place Especially in Canada Is Viewed by Many With Some Misgivings—Warns Against Overrating Ability of Market in the United States To Absorb Increasing Output

[FROM OUR REGULAR CORRESPONDENT]

MONTREAL, Que., May 17, 1926.—The extraordinary and indeed unprecedented expansion of the news print industry in Canada, which is proceeding now at a greater pace than ever, is causing many people to fear that the time is not far distant when there will be an over-production of news print, with serious consequences.

Mr. Price's Remarks

Mr. Price's annual address to the shareholders of Price Bros. & Co. dealt at some length with the plans of the company during the next few years. He said:

"We are now carefully planning the increasing of the Riverbend Mill from 200 tons to 400 tons daily capacity, which will bring this mill to what we consider an ideal unit for economic operation. This will make the total capacity of your company's mills equal to 950 tons per day, or 290,000 tons per annum. For this we do not intend to dispose of any further securities of the company.

"The enormous expansion which is taking place, particularly in Canada, of the news print industry is viewed by many with some misgivings. It is true that expansion has no precedent in the history of this country. Within a few years the industry has grown so fast that today it is one of paramount importance to the country and particularly to the province of Quebec. The principal market for our product is the United States of America, where the demand continues on the increase; but the ability of this market to absorb ever-increasing production should not be over-rated.

"Our forests are the basis of the industry and the conservation of these is a fundamental necessity. The laws and regulations governing both the holding and operating of these vast natural resources must be respected and improved as future conditions demand. Exploitation and speculation should be definitely discouraged. It is our policy to spare neither thought nor expense to reduce the fire hazard and to control our logging operations by scientific management.

"It is a source of gratification to me to know that the Government of this province is fully alive to the situation and that the Prime Minister has declared the intention of his Government to see to it that existing mills are properly provided with the necessary timber limits to guarantee their future operations before newcomers will be considered.

"The conservation of your company's properties has always been an important factor in the policy of your board, and today we feel we are so established and economically situated as to fully justify the continuance of our program of expansion to its entirety."

A Stock Broker's View

Meanwhile a bulletin issued by Craig, Luther and Irvine, members of the Montreal Stock Exchange, sets forth the point of view of experts in investment. The bulletin says:

"Lack of interest in news print stocks is accepted as an indication that the outlook is far from clear. In fact, many students regard the future as even more obscure than it has been at any time in the past few years. This arises largely from the fact that plans for increased production have gone ahead unabated. In addition to the new tonnage, amounting to 890, brought into effect in 1925 by ten companies, there is more than double that amount scheduled to start this year. The total compiled by statisticians of the industry amounts to 1,815 tons by nineteen different companies.

"The problem is how this increased tonnage is going to be absorbed by the trade without forcing some restrictions on the rate of production by older mills. One of the most important factors in the cost of production is the maintenance of continuous operations at or near capacity. If the mills have to reduce output, it not only reduces their revenue, but increases the cost of manufacture, so that net profits are bound to suffer.

"One group of students of the situation looks to a further reduction in the price of news print as one of the preliminary steps to a solution. It is admitted that such a step would not solve the problem of over-production at once, but it is considered that it would work in that direction eventually. About the only good purpose advanced for such a step is that a good many mills in the United States which are barely existing on $65 news print would be forced out of business by a reduction to $60 per ton.

"Another reduction of $5 per ton, following the $5 cut which went into effect officially at the beginning of this year, would cut pretty heavily into the profits of even the best money makers in the business, and perhaps considerably inconvenience the higher cost mills. Some dividends might be adversely affected by such a situation, but it is recalled that the leading companies which have been most in the public eye through their quotations on the stock exchanges are generally in very strong fiscal positions as a result of excellent working capital and accumulated profits positions. This would enable them to live through a lean period and take care of dividend requirements in all probability until the mania for expansion runs its course."

Quebec Forest Surveys

The Hon. Honore Mercier, Provincial Minister of Lands and Forests for Quebec, has signed a $100,000 contract with a French hydro-plane company for a complete survey of the forest resources of the Gaspe Peninsula during the next two years. It is also expected that nearly all the Lake St. John and Chicontimi districts will be surveyed during the present year.

Taxing of Power and Timber

Premier L. A. Taschereau will shortly call a conference of the representatives of the lumber and power industries to discuss some aspects of the new tax to be levied by the Quebec Government on those industries for the benefit of education in the Province.

Donnacona Paper Company

The Donnacona Paper Company of Donnacona, Que., is reported to have been taken over by interests in close association with the St. Maurice Corporation. Ever since its inception, the Donnacona Company, which owns an excellent mill erected in 1914, has been a closely-held property. Indeed it has been practically a family holding of the Kernan family, who have been traditionally associated with the paper industry in New York State for generations. It owns about 600,000 acres of timber, mainly in the northern part of Portneuf County.

Duke-Price Power Co.

It it understood that the head offices of the Duke-Price Company, which is carrying out an immense hydro-electric development on the Saguenay River, will shortly be removed from Quebec to the Canada Cement Building, Montreal, so that closer contact may be established with some of the hydro-electric interests now associated with the company.

Paper Demand Fluctuating in Philadelphia

Some Distributors of Fine and Coarse Grades Enjoy Greatly Improved Market, While Others Complain of Slackening—Excellent Seasonal Request for Wrappings, Bags and Fancy Papers Developing—Out of Town Buying Most Impressive

[FROM OUR REGULAR CORRESPONDENT]

PHILADELPHIA, Pa., May 17, 1926.—Two extremes of business activities are reported in the Philadelphia industry. On the one hand, a very much improved market for both fine and coarse papers is being experienced by a few of the distributors. The majority on the other side complain of a decided slackening. While this two sided market has been the trend within the past week, a feeling of optimism has been brought about in the more frequent inquiries from the outlying sections of the State, where broader business is being enjoyed in the farming and industrial centers. It is assumed that purchasers of all lines of papers will again come into the buyers' market just as soon as the British labor situation clears and much of the cautiousness now being manifested disappears from the local industries that have been fearful of the consequences of a prolonged labor warfare.

Fine Papers Moving Steadily

The most marked evidence of two sided paper distribution is that of the fine paper division, where the larger publishing and printing consumers of book and coated products have been steady purchasers of these grades. The smaller printer consumers have been almost entirely out of the market and when orders are secured the quantity is confined to a minimum and to the moment's requirements. Cover papers are active at this season but bonds and ledgers and the other grades of writing papers have been gradually slowing down to a narrow trading.

Coarse Papers Hold Firmly

Many of the textile mills and larger industrial concerns of the city have been confining their operation to a part time basis, and the result is reflected in a lessened demand for papers used by these larger enterprises of the Quaker City. While the demand for specialties has been slackening, the general market has been broadening, and those dealers who conduct a general distribution business have been enjoying an excellent seasonal market for wrappings, bags, and fancy papers used in mercantile pursuits. Out of town buying has been more impressive than the city trade, especially in the farming and industrial sections of central and eastern Pennsylvania. Prices on all grades have been holding firmly. Few mills have been sending their representatives into the local market. Those that have been doing so are reported to have sufficient orders to keep at present speed of operation for the next three weeks or so.

Chapter Stocks Marked to Lower Levels

While there is no great amount of paper stock accumulating in the warehouses of the local wholesalers of paper making supplies, the cheaper grades of papers have been revised to lower levels in the quotations made by the mill men. A quotation list sent to the stock dealers by the mills, quotes the cheaper grades of paper stock at the lowest prices of the year. The higher grades of new papers have been holding firmly, and very little of these have accumulated. The mills have been the dictators of prices on these cheaper stocks, and the dealers who do not have the space for storing the bulkier grades have been allowing the mill prices to rule. In sending out the price quotations, the mills are reporting that they have plenty of stocks on hand, and are not willing to make further commitments unless values are at the levels listed.

Norwood Paper and Paper Stock Co. Bankrupt

A voluntary petition in bankruptcy was filed in the United States District Court of Philadelphia during the week by the Norwood Paper and Paper Stock Company, Inc., 216 South Front street. The business has been established for the past eleven months, and was devoted to the wholesaling of paper stock. The head of the firm was Charles Ashbridge, for many years superintendent of the M. O. Raiguel Company, stock dealers, one of the oldest firms engaged in this line of trade activities in this section. The Norwood company occupied a warehouse and offices at the Front street address, having opened there shortly after its incorporation. The liabilities are estimated at $8,420, and assets at $1,151. Edward F. Hoffman has been appointed Referee. The doors of the firm have been closed pending settlement of the financial difficulties.

D. L. Ward Co. Entertains Printers

The technical relationship of paper and its association with the mechanical side of the printing industry was discussed by Fred Wagner, of the S. D. Warren Company, before the men who come in contact with the practical side of the printing industry, and guests of the D. L. Ward Company, at luncheon, last Thursday. With ninety members of the staffs of printing shops, including compositors, pressmen and their superintendents as guests, Mr. Wagner, whose duties are those of adviser to the printing crafts for the Warren Company, went over the entire problem of paper troubles and their remedy in the mechanical departments of the allied industry. He was introduced by President George W. Ward, of the company, in a preliminary talk on the Graphic Arts Division of the Ward Company, and the exhibits which have been featured as part of the educational campaign of that paper distribution house. These exhibits have been arranged under the direction of Andrew J. Collins, manager of the Ward Graphic Art Division, who has been featuring within recent days the Direct By Mail Exhibit and the Graphic Arts Leader Exhibit, a collection of printing specimens assembled from all parts of the United States. This exhibit has just been returned to the Ward Graphic Arts Room, after a tour of the country, where it was exhibited in forty paper houses in as many cities. The luncheon was served in the Graphic Arts Department at the Ward headquarters.

Warehouses of Schmidt and Ault Paper Co. Destroyed

Fire of unknown origin destroyed two of the warehouses of the Schmidt and Ault Paper Company plant in York, Pa., last Wednesday. It is estimated that the loss will total more than $100,000, according to dispatches received here. The warehouses were devoted to the storage of finished paper stocks, and were well filled at the time of the fire. The Schmidt and Ault Company plant is given over to the production of box board, indented and wrapping papers and specialties.

Creditors Meeting Postponed

Meeting of the creditors for the purpose of determining the disposition of the business of the Edwin T. Garrett Company, of Lansdowne, Pa., manufacturers of tissue papers, which was to have taken place last week has been postponed by Receiver G. Wilson, awaiting further developments in the paper making firm's affairs. It is understood that the financial difficulties were brought about by the additional expenses incurred as a result of the purchase of the large tissue making machine which the proprietor, Harvey Garrett, bought from the Scott Tissue Company of Chester, Pa., when it disposed of the old machine to make way for the new mammoth equipment now installed in its plant. The Scott machine was considerably larger than the building arrangements of the Garrett Mill could accommodate, and so the owner was obliged to go to the additional expense of enlarging the mill and purchasing other equipment to facilitate the operation of the machine purchased from the former manufacturers.

Tissue Paper Manufacturers Meet at Middletown

Z. W. Ranck, President of the Crystal Tissue Co., Presides at Several Days Session of the Organization at Which Matters of Technical and General Interest are Discussed—W. B. Shuler, of Shuler & Benninghofen Co. of Hamilton, Makes Gift to Hospital

DAYTON, Ohio, May 17, 1926.—An important session of the Tissue Paper Manufacturers' Association was held the latter part of last week at Middletown. Representatives of the trade registered at the Civic Association which contributed to their welfare when in the city.

Z. W. Ranck, president of the Tissue Paper Manufacturers' Association, and who is prominently identified with the business and social life of Middletown, presided over the meeting.

The first day was passed in technical discussions of problems particularly linked with the manufacture of tissues.

During the afternoon the visitors inspected the Crystal Paper mills where a high grade of tissues is made, and the Sorg Paper Company's plants among the most modern in the "paper city."

Dinner was served at the Hotel Manchester after which the mill men were guests at the concert given by Miss Louise Hunter, a Middletown song prodigy, whose fame spreads across the land like that of Middletown for its paper products. Miss Hunter, who is a granddaughter of Judge Todhunter of Middletown, came home after a victorious tour and was royally welcomed.

Following the song festival, a reception was held at the home of George W. Verity, president of the American Rolling Mills Company. The mill men inspected the rolling mills prior to the reception, thus combining business and pleasure in a novel manner.

At the banquet, which was one of the events of the meeting, Arthur Walwyn Evans, humorist and lecturer of wide repute, entertained the tissue men by telling of his recent trip to Germany. He spent last summer in that country and has since that time presented his observations to a number of commercial bodies throughout the United States. A native of Wales, he came to this country years ago to assume a pastorate in Springfield, Ohio.

A general conference was conducted by a committee from the Tissue Paper Manufacturers Association and the National Paper Association on the last day of the meeting at which subjects of special interest to representatives of both organizations were discussed with mutual helpfulness, according to those who attended.

Purchasing Agents Meet at Dayton

Without a doubt one of the most profitable meetings of the Purchasers' Association of Dayton was the annual dinner given at the Grey Manor the past week, at which the election of officers was held.

R. E. Norris of the Standard Register Company was elected president; K. M. Brower, first vice president; C. E. Willand, second vice president; F. A. Latt, secretary; J. M. Leonard, of Piqua, local director; and J. E. Story, national director. All of the officers represent Dayton industries with the exception of Mr. Leonard.

R. C. Williams, assistant to the president of the Central Ohio Paper Company, addressed the gathering on the subject of "Paper Making." A three-reel motion picture subsequently was shown. It depicted the manufacture of paper and proved a revelation to the assembled purchasing agents, many of whom never before realized the importance of this industry. R. C. Ellis, salesmanager of the Egry Register Company of this city, spoke on the topic, "Making Business Records."

Mrs. A. M. Orr to Remodel Nurses' Home

Memorial Hospital at Piqua will be remodeled, or rather that section devoted to the nurses and known as the Nurses' Home, will be refurnished at the expense of Mrs. A. M. Orr, president of the Orr Felt and Blanket Company.

The work was started this week through the direction of Mrs. Orr who has donated liberally to the institution in the past. Several years ago the Nurses' Home was renovated at Mrs. Orr's expense. She declared at that time that she would maintain the building, which was erected some years ago by General W. P. Orr, the founder of the Orr Felt & Blanket Company. The structure was erected in memory of the late wife of General Orr, Mrs. Frances Meilly Orr.

T. T. Webster Appointed to Special Committee

T. T. Webster, traffic manager of the G. H. Mead Company, was appointed a member of a special committee of the Ohio State Chamber of Commerce which has been called to meet later this week in Cleveland to organize a fight against the so-called Chicago "water steal."

The Mead Company, engaged in the paper business, though it does considerable Lake shipping, is only indirectly interested in the matter.

Mr. Webster will serve as the representative of this district. He is president of the National Traffic Association.

The call for the Cleveland meeting to consider the Chicago water situation, which is of much interest to paper concerns in various localities, was issued by Frank B. McMillan of Mt. Gilead, and George B. Chandler of Columbus, president and secretary, respectively, of the State Chamber of Commerce, after conferring with United States Senator Frank B. Willis and Representative Theodore E. Burton concerning the perils of the Lake commerce resulting from Chicago's continued abstraction of 10,000 cubic feet of water per second from Lake Michigan through the Chicago drainage canal.

It is expected that at the Cleveland meeting a movement will be started for concerted opposition to the rivers and harbors bill which comes up for passage in the House next week and which contains an indirect legalization of the Chicago diversion by authorizing a deepening of the Illinois river which can obtain water only from the Chicago canal.

The interest of paper manufacturers and other industries of the Miami Valley lies chiefly in shipping facilities, which if handicapped would prove detrimental. There are many who state the diversion of water in such large quantities should be checked before permanent harm results.

W. B. Shuler Makes Gift to Hospital

W. B. Shuler, of the Shuler & Benninghofen Company of Hamilton, who is widely known in the paper industry, has returned from a trip. As soon as he arrived in Hamilton he hastened to the office of the Fort Hamilton Hospital Association and pledged $10,000 to the hospital fund, to be used for the construction of a new institution.

This was an additional pledge, given after the fund was to be closed. The total subscriptions now exceed $490,000. The paper manufacturers and those representing allied trades, have contributed liberally as increased hospital facilities are needed in Hamilton. The first payment on pledges was due April 15 and was met with ready response from the greater part of the donors, it is stated.

Work on the hospital will proceed promptly and a site will be chosen within a few days, the committee now preparing its final report.

Tradesmen during the past ten days lent their aid in putting over an $850,000 drive in payment for the Y. M. C. A. which will erect a Boys' Building, adjacent to its present structure, and will build a new Y. M. C. A. for the colored population on West Fifth street.

Paper Business Generally Dull in Chicago

Natural Reaction, Following Banner First Quarter, Assigned by Sales Managers as Reason for Present Slump—Slowing Up Began in April—Mail Order Business Reported to be Taking a Lot of Stock—Chicago Paper Co. Introduces New Safety Papers

[FROM OUR REGULAR CORRESPONDENT]

CHICAGO, Ill., May 14, 1926.—Were the heads of paper houses to get together to formulate a concise opinion of market conditions at the present moment, they would very likely state it conservatively in only two words, viz., "Nothing startling." At least, that is the term used by a majority of sales managers questioned by the PAPER TRADE JOURNAL correspondent.

Notice that this two-word characterization has been referred to as a conservative one. It is indeed conservative—too much so, some would say. The downright truth plainly stated, is that trade is dull in nearly all lines, and inquiries on new business are not keeping up in satisfactory amount. One or two handlers of fine stock reported, however, that there is some nice business here and there of a special nature.

The dullness isn't exactly seasonable, for it is still too early for the customary slack season that paper handlers expect following the spring rush of orders. In Chicago the demand does not usually fall off until summer weather is actually here—and what Chicagoan would dare to predict summer weather until the month of roses arrives?

The slowing up came in April, and while this was earlier than in former years, there is very little grouchiness in evidence, and paper men are still able to begin the day with smiles, remembering that the first three months of the year were banner ones. Business was so good during the first quarter, in fact, that sales managers are disposed to assign this as the principal reason for the present slump.

Some houses are filling orders for stock used by printers who are working on jobs of a special nature just now. Mail order business, in fact, is "taking a lot of stock," to quote one large paper concern, and mail order solicitation seems to be very active at the present time. Printers of children's books, of playing cards and other printed products not of the usual advertising commercial type are buying paper in good quantities.

Along standard lines, it is not felt that there is much prospect of things opening up again for several months. The fall business usually starts late in August or early in September, and there is little else to do in the meantime except plug for pick-up orders of any kind available.

Chicago Paper Co. Presents New Lines

The Chicago Paper Company is concentrating efforts on new lines being placed or soon to be placed on the market. The newest and most unique of these is the mill plant paper Laidtone. It is made in various styles—a book paper and two lines of cardboards with Laidtone effects. In this new paper the design is on the surface only and doesn't interfere with the printing facility. Laidtone is a patented process paper which takes half tones or any kind of printing. It is said to be making a decided hit with the trade.

Another project of the Chicago Paper Company will be the introduction of a new line of safety paper made by the Gilbert Paper Company, called Double Bar safety paper. This paper resists ink eradicators, turning brown when an effort at erasure is made. Double Bar safety paper is not being offered to the trade at present, but introductory work on its marketing is being performed and it will soon be listed as a regular sales line.

Coarse Paper Situation

Handlers of coarse paper also find that inquiries are becoming conspicuous because of their increasing absence; but they, like the paper trade in general, are not offering up any strenuously audible yelps of dismay. They, too, are still thinking about the nice bunch-upon-bunch of orders that came their way during January, February, March, April and even into the first week in May. With such a happy volume secured to date, it is only natural, they figure, that a let-up should come at this time. Indeed, March seems to have been a record-busting month, or something like that, so that this branch of the industry is not noticeably pessimistic.

In the coarse paper field, the brisk demand kept up a few weeks longer than in fine papers, so that the present scarcity of orders is looked upon as little more than the annual summer slackness, though it is admitted that it came a little earlier this year.

The Pilcher-Hamilton Company is offsetting this by the increased sale of drinking cups and Nibroc towels. Such business naturally increases in the summer time, for many people who do not care to use paper towels in the winter do not hesitate to use them freely in summer. Present indications point to a very substantial volume of business in other popular summer lines.

Old Paper Market Weak

The market for old paper is weak. All grades are uniformly less in demand, with the exception of news blanks, which haven't dropped much. The market for old paper has been off for more than a month. Demand usually becomes reduced in summer, of course, when the heavy spring supply causes the market to be flooded with paper, automatically resulting in lower prices. Inasmuch as the slackness came earlier this year than usual, it is believed that the resumption of normal business will begin just that much sooner—within the next two months, at least.

Paper Board Conditions

Practically the same conditions apply to the paper board branch of the industry. No one feels downhearted, and aside from the fact that conditions seemed to have rushed the season somewhat, the entire industry appears to be merely standing by until their customers' accumulated stocks begin to dwindle and a natural reaction sets in.

Miscellaneous Trade Notes

Heller & Merz announce a change of office address. The headquarters of the firm's activities in this territory have been transferred from 109 West Austin Avenue to 146 West Kinzie street.

P. Goldman & Sons, which recently succeeded the firm of Francis Hughes Company, dealers in old paper, is conducting the business at the same location, 2100 Loomis street.

Mr. Southworth, of the Hempshire Paper Company, South Hadley Falls, Mass., was a Chicago visitor this week.

To Grant Islands to Northern Paper Mills

[FROM OUR REGULAR CORRESPONDENT]

WASHINGTON, D. C., May 10, 1926.—Representative Schneider of Wisconsin has introduced a bill in the House which has been referred to the Committee on Public Lands "granting to the Northern Paper Mills certain islands in the Menomonee River."

The bill provides that the Secretary of the Interior shall be authorized to sell to the Northern Paper Mills at the appraised value whatever interest the United States has in the unsurveyed islands, "provided, however, that nothing herein contained shall have the effect of diverting any rights to the islands or any parts thereof as may have been vested in any person or persons in the State of Michigan or in the State of Wisconsin." A similar bill has been introduced in the Senate.

Paper Demand in Toronto Shows Improvement

Jobbers Report Considerable Betterment With More Favorable Weather—A. P. Costigane, Secretary of the Ontario Pulp and Paper Makers Association, Addresses Government Superintendents On Choosing Men Better Fitted for Work in Pulpwood Camps

[FROM OUR REGULAR CORRESPONDENT]

TORONTO, Ont., May 17, 1926—With the advent of warm weather and more settled conditions generally, trade in the paper line which for the last two weeks has been rather quiet, has picked up considerably and jobbers are now in a better frame of mind. Coated paper mills are busy for the first time in many months as this is the harvest period for these concerns owing to a large amount of catalogue printing and the publication of other literature. There has been a falling off in light weight tissues and specialties but all the big mills in other lines report business holding up to last year.

There is plenty of ground wood pulp being produced at the present time as water conditions are of the best. The demand for ground wood pulp is not quite as firm as it was. So far as sulphite pulp is concerned, it is reported that the mills will be kept active all summer. The call from the new plants making rayon silk is a new outlet for their product. This will have a tendency to keep up prices. It is rumored that one of the large mills of the Canadian International Paper Company has made a contract with one of the artificial silk mills to supply twenty thousand tons the first year, thirty thousand the second, and forty thousand the third on a three year contract.

Printing establishments are getting busier, which is having a good effect on various lines of paper. Purchasing is still carried on in small lots as required for the stocks of jobbers are much lighter than they used to be, but the many orders received make quite a respectable total each week. News print is in firm demand and reserve stocks are not heavy.

In the rag and waste paper market, there has been a slight reduction on soft white book shavings and white blank news while mixed papers are down ten cents and fancy shirt cuttings three quarters of a cent. The market for cotton cuttings is lower and the demand not very strong.

Paper box plants are fairly busy but there is no great rush on. If the good weather continues paper merchants expect that trade on the whole will be a little ahead of the corresponding month of last year.

Choosing Men for Camp Work

A. P. Costigane, secretary-engineer of the Ontario Pulp and Paper Makers Safety Association, and Alex R. White, chief sanitary inspector for Ontario, recently addressed a group of government employment superintendents in Toronto on the subject of choosing the most suitable men for work in the logging and pulpwood camps. One of the main objects brought out in the discussion was that the agents knew very little about the logging industry and good judgment had not always been exercised in government employment offices in selecting men with woods experience or a desire for steady work. The "drifters" are placed and replaced by government officials and while a large number of placements are made each season, a comparatively small percentage of the jobs are being permanently filled. Operators in the pulpwood camps are forced to pay the expenses in and out of these "drifters" who rarely remain long enough to compensate the companies for their fare and other costs.

Meeting of Bondholders Called

Second mortgage bondholders of the Fort William Paper Company will meet in Toronto on May 26, when they will be asked to consent to certain modifications in the trust deed in order that there may be authorized an issue of first mortgage bonds to the extent of $12,500,000. This is a considerable increase over the present amount outstanding and will provide new capital for extensions to the plant of the Fort William Paper Company, including an increase in sulphite production and ultimately bringing the capacity for news print up from about 150 tons daily to 400 tons. The amount of second mortgage bonds outstanding is $1,500,000.

This plan for increased output is one of three that are under way in connection with Spanish River and Abitibi associated groups. The second is the construction of a news print mill by the Manitoba Paper Company and a third projected development some time next year of about 250 tons by the St. Anne Power and Paper Company.

Railway Built to New Plant

The Street Railway Company of Port Arthur, Ont., is extending its line to the site of the New Thunder Bay paper mill and it is expected that the extension will be in operation in the near future. There are 115 men and some 40 teams now working on the paper mill site and the street extension will cost in the neighborhood of $18,000. Ultimately there will be employed at the paper mill between 600 and 700 men.

Spruce Falls Co. New Officers

F. J. Sensenbrenner, of Neenah, Wis., was elected president of the Spruce Falls Power and Paper Company, Limited, of Toronto and Kapuskasing, Ont., at the organization meeting held in Toronto recently. J. H. Black, of Toronto, was elected vice-president and general manager; Ernst Mahler, of Neenah, Wis., was elected secretary, and J. C. Kimberly, of Neenah, Wis., treasurer. In addition to the foregoing, Adolph S. Ochs, Julius O. Adler and Arthur H. Sulzberger, were elected directors, making seven in all. The Spruce Falls Power and Paper Company, which is closely allied with the Kimberly-Clark Company, of Neenah, Wis., will develop a 500-ton paper mill with sulphite and groundwood plants and hydro-electric development at Kapuskasing and Smoky Falls. The company has entered into a long term contract with the "New York Times" for the supply of news print paper for that journal on completion of the new mills in Northwestern Ontario.

Extensions to Fort Frances Plant

The Town Council of Fort Frances, Ont., recently decided to close certain streets in order to allow the Fort Frances Pulp and Paper Company to make certain extensions to their plant. The company has given the necessary undertaking to comply with the requirements of the Municipal Act respecting the closing of the streets and the Council acceeded to their request. The facilities thus afforded will mean large additions to the plant of the company.

The Fort Frances Pulp and Paper Company organization has at work in Fort Frances and in the construction of power plants tributary to and in the work of building transmission lines, over 1,000 men, which will be increased to 1,500 within a few days. G. McLean, vice-president of the company, says with their augmented power units and facilities they must keep pace to provide the necessary manufacturing units to absorb this power. By the closing of the streets the water frontage of the company will be enlarged.

Location of Spruce Falls Plant

Progress on the $15,000,000, expansion programme of the Spruce Falls Company, Kapuskasing, Ont., has been retarded somewhat as a result of the uncertainty which has arisen over the location

(*Continued on page 39*)

for continuous production of uniform quality paper~

Of 309 Vickery Felt Conditioners sold in America 184 represent repeat orders

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The Vickery Felt Conditioner

Bird Machine Company - - South Walpole, Mass.

Sesqui-Centennial Paper Exhibit in Jeopardy

[FROM OUR REGULAR CORRESPONDENT]

PHILADELPHIA, Pa., May 17, 1926.—Unless the paper manufacturers are more willing to co-operate with the Sesqui-Centennial Paper Exhibit Committee in providing for the paper trade exhibit at the coming 150th anniversary celebration of the Signing of the Declaration of Independence which will be commemorated in the Sesqui-Centennial Exposition, to open here in June, there is not likely to be a display of the industry represented among the vast number of industries already contracted for in the Palace of Liberal Arts and the other mammoth buildings now nearing completion on the grounds. While other larger industries of the nation and foreign countries are going ahead with plans for their exhibits on a vast scale, the paper trade display is lagging for want of proper support. This was disclosed at the meeting of the Sesqui-Centennial Paper Exhibit Committee held last week, when Chairman Simon Walter and his associates on the committee, Norbert A. Considine, Arthur B. Sherrill, Morgan H. Thomas and David Lindsay, Jr., met to discuss the proposed exhibit and its prospects.

Paper Men Delay in Responding

No definite plans could be outlined because of the delay of the paper manufacturers in responding to the appeal sent out by the committee in conjunction with the illustrated brochure describing the scope and plans which were contemplated for the paper exhibit. The paper exhibit cannot be perfected unless the manufacturers and dealers are willing to aid in financing the display, and so far there has not been a generous response to the appeals for support sent out by the committee. A few manufacturers have come forward with material aid in funds, but they are not sufficient to defray the cost of the exhibit. In responding to the request of the committee for practical support of the prosposition, most of the manufacturers state that since the Executive Committee of the American Paper and Pulp Association has not approved the Exposition they do not feel justified in participating in the Paper Exhibit. While the manufacturers are taking this attitude, the committee does not feel justified in arranging an exhibit with many of the leading advertised lines of papers conspicuous by their absence. Unless the leaders in the industry come forward with pledges of co-operation the committee plans to either abandon a Paper Exhibit entirely, paying out of their own pockets the expenses incurred to date or endeavoring to arrange with the local Typothetae to combine a paper exhibit with the Printers Show at the Exposition. This would leave the wrapping and specialty side of the business without representation of any sort.

Fail to Appreciate Opportunity

In expressing its regret over the attitude of indifference of some of the leading manufacturers of the country towards the exhibit of the industry, the committee states its sorrow in the perforced retirement of the industry from the Sesqui, and the failure of the manufacturers to realize what an excellent opportunity is afforded for presentation and exploitation of the paper making enterprises of America. In advertising value alone the Sesqui-Centennial is unbounded. There are to be attracted to the Philadelphia celebration more than 32,000,000 people and with more than 250 conventions and fraternal and business gatherings already scheduled to take place within the year, the paper industry will be broadly exploited in an occasion rarely offered for such purposes. There is no industry which is representative of the achievement of American enterprise as that of paper manufacture, nor is there an industry which involves such a huge outlay of capital and cost of maintenance, employing several hundred thousand of hands. In its mechanical ingenuity alone, the highest attainments of American progress are demonstrated and its complete system of manufacture from the growing and gathering of the raw products to the transportation of the finished materials the paper trade covers almost every field of allied American industries of world wide importance, all of which could be brought before the public if a worthwhile exhibit could be assembled.

The vast sums tied up in the paper making industry and its comparative value with other enterprises is demonstrated in the recent issue of the Philadelphia *Public Ledger*, which contained a summary of the assets and business of the St. Regis Paper Company, with its backing of tangible assets of $25,000,000 and $5,000,000 Bond Issue recently offered, yielding 6.10 per cent. Norbert A. Considine, of the committee, made this paper company's business summary an illustrative factor at the local exhibit discussion. He took another industry and its advertisement which appeared simultaneously with the paper company's story as a comparative factor to show the greater yield of the paper manufacturing business to that of a large New York Apartment House and its 5.90 per cent of income and thus establishing the importance of the industry as investment opportunity. He used the illustration to show how the valuable lesson of education of the public in the industry, and its importance and products, might be taught through a comprehensive exhibit of the paper making business as it is conducted in America and, that one of the purposes to be accomplished by the Paper Exhibit at the Sesqui-Centennial was to acquaint the millions of visitors with the extent and stability of the great paper industry, so that securities of paper companies would receive more favorable consideration from the investing public. It is felt, he said, that the accomplishment of this purpose alone would justify the advertising value of the publicity in the various types of paper.

Importance of Exhibit Grows

As the time for the opening of the Exposition approaches the immensity and importance of the coming celebration is more deeply impressed upon the visitor to the site of the Sesqui grounds. Daily new accomplishments in the building program are revealed and the scene is being transformed into a befitting setting for the anniversary of the declaration of American Independence. Beautiful structures are being reared on the vast acreage set aside by the city for the Sesqui Exposition and numerous exhibits already are under way which represent the most modern of developments in both foreign and American industries in the broadest scope. Travelers from the Western and Southern part of the country and from our adjoining neighbor nations, are filled with bright hopes for the success of the Exposition, in the enthusiasm that is being displayed in those sections by the population, contemplating a trip to the city for the sole purpose of viewing the sights to be offered in the international displays. Railroads are exploiting the coming event and are offering special reduced rates as inducements for travelers over their lines and this has been a big advertisement and stimulation of interest among thousands of citizens scattered over the country who are anticipating a journey to the City of Brotherly Love during the six months that the Exposition is in force. For that reason the local paper men on the Sesqui Committee are working so zealously to interest manufacturers in the advantages to be had in this world wide opportunity for exploitation of the paper industry through the Sesqui-Centennial exhibits. They are urging the manufacturers to come into the fold and with other industries give the paper trade its proper representation among the displays of modern enterprises in line with its importance in the world's work and progress.

The Sesqui Commission has, through the efforts of Chairman Walter, assigned one of the best locations in the Palace of Liberal Arts to the paper trade, which will give it an outstanding position among the displays, another advantage which should influence the manufacturers to participate more freely in the exhibits. Chairman Walter has requested that the manufacturers who are contemplating entering the exhibition place their plans before the committee at an early date, as the time for the opening of the Exposition is near at hand and, only a few weeks remaining for the development of the paper displays.

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In The Emergency

Experience is wisdom. From experience we have learned that to give just a little more than expected will bring good dividends in the way of appreciation, friendship and more business from the same source. It is another name for service. We have the ability to perceive and the willingness to carry out just such policies, which mean so much for our customers.

Are your first open water shipments delayed? We can be of assistance should you require Bleached or Unbleached, Strong Mitscherlich or Easy Bleaching Sulphite and Sulphate Kraft Pulps as well as Groundwood.

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Fined for Short Count on Tissue Paper

Under the general supervision of the Tissue Paper Manufacturers Association, a strenuous campaign against short counting on toilet paper is being waged and much good has already been accomplished, especially in the states of New York, Massachusetts, Pennsylvania and Illinois.

A case of vital importance to the industry was recently decided at Brooklyn in the Court of Special Sessions of the State of New York, in which the People of the State of New York were the complainants against the Invincible Paper and Pulp Company, defendant. The case was tried before the Hon. Charles Pope Caldwell, justice presiding, the Hon. A. V. B. Voorhees and the Hon. Thomas J. Nolan, associate justices. Bernard J. Becker, assistant district attorney, represented the people, and Jacob L. Holtzman appeared for the defendant.

Joseph H. Mazer, vice-president and manager of the Wallabout Specialties Corporation, converters of toilet paper and paper towels, of 219 3rd street, Brooklyn, was called as a witness for the People. He testified that the Invincible Paper and Pulp Company, of which Abraham George Lutz was president and manager, sold to his corporation a carload of Japanese toilet paper, containing approximately 350 cases, which was delivered on or about October 26 from the manufacturers, the General Tissue Paper Corporation, of Frankfort, N. Y. The witness made an affidavit that the delivery was less than the quantity shown on the roll and according to the invoices, viz., 1,000 sheets, and stated that an inspector came down and took away a number of the rolls to examine.

Thomas V. Roche, Inspector of Weights and Measures, testified that he went to the premises conducted by the Wallabout Specialties Corporation about November 27 and inspected certain rolls of toilet paper given to him by Jacob Mazer, brother of the previous witness. He took away a case of 100 rolls, of which he counted 20 separate rolls and weighed the other 80, assisted by another inspector. According to the witness the number of sheets in the rolls counted were 744, 706, 694, 714, 691, 717, 704, 708, 705, 791, 707, 703, 701, 690, 748, 707, 764, 748, and 741. The inspector also found that a thousand sheets with the cover and the wrapper weighed 9¼ ounces, whereas the highest of the eighty tested only weighed 7⅛ ounces.

John A. O'Melia, attorney and counselor at law, called as a witness for the People, testified that Mr. Lutz had approached him on the day of the trial. Said Mr. O'Melia, "He approached me today and he told me he was sorry that all these things had happened, that he had gone through quite a bit of bitterness over it, and he told me that he had taken the presidency of the General Tissue Corporation at Frankfort, N. Y., in order to help out his own creditors' interests in that corporation; he stated that in view of the disclosures which had been brought out by this case and in view of the prosecution in such a vigorous fashion, that he was quitting or had withdrawn from that corporation."

Abraham George Lutz, called as witness for the defendant, testified that he was the president of the Invincible Paper and Pulp Corporation, the defendant in this action, and that this corporation acted as sales agent for the General Tissue Paper Corporation in New York City. Questioned about his connection with the General Tissue Paper Corporation, Mr. Lutz testified that he became an officer of the company and had representation on the board of directors upon the advice of counsel and in order to protect his interest as agent for this mill, as it was short of money, and he had advanced money to the corporation. He stated that he had nothing to do with the management and that he had no reason to believe that somebody in Frankfort was shipping the rolls short. He also stated that he had now severed his connection with the General Tissue Paper Corporation.

Jacob Mazer, called as witness for defendant, testified that he was president of the Wallabout Paper Specialties Corporation. He said that Mr. Lutz telephoned to him before the inspectors came to the effect that he had heard that there was something wrong with the paper and that he wanted the company to return it. Mr. Lutz called on him the following Monday after the inspectors had been there and after ascertaining that the inspectors had found the rolls short counted, requested him to ship the cases back to the mill.

After further testimony by Thomas V. Roche, recalled for the People, and Abraham George Lutz, recalled for the Defendant, the case proceeded—

Justice Caldwell: As I gather the case now, it is practically conceded here that these complainants bought certain paper through this defendant as agent for another concern undisclosed to them at the time the purchase was made, that when the paper arrived it was short, that this officer, who is an officer in the both companies, claims that he didn't know that it was short.

Defendant's Counsel: Right.

Justice Caldwell: That's the whole of it.

Defendant's Counsel: That's the case.

Justice Caldwell: The question is whether or not this selling agent corporation is liable under those circumstances.

Defendant's Counsel: Yes, sir. I want to show your Honor how serious that is to us. We were acting as agents for this company, we do business in this city, we represented that company, and this company when they shipped out the merchandise billed it to us, in this case at $3.05 per case, ten days, 40 less 7 per cent, and that's our commission in the case, $74.30.

Justice Caldwell: I understand exactly, it is all perfectly plain now. Do you want to hand up a memorandum on the question of the liability of this corporation, under the presumption, that is, the legal liability, in view of the presumption that an officer of a corporation is supposed to know what the corporation does? Do you want to hand up a memorandum on that or not?

Defendant's Counsel: If the purpose of a memorandum is simply argument, it would be a repetition of what I could say here.

The Court: Do you want to give us any cases?

Defendant's Counsel: I don't think I'd find anything in a criminal case such as this, I don't think I could find anything which would help this Court, but I think there are certain elementary rules of law. Now, of course, the Invincible, I come in and I assume full responsibility for the Invincible Company, for the corporation I represent for anything that Mr. Lutz did, but I want to show to your Honors how serious this thing is to us. We represent the General Tissue today and we may not represent them tomorrow.

The Court: Just a moment. What section is this?

Mr. Becker: Section 2411.

The Court: Go ahead.

Defendant's Counsel: We realize the damage that has already been done to this company is greater than any penalty this Court can impose upon this corporation, if this Court were to impose the maximum penalty under law, it would not begin to compare with the damage that this company suffered because of loss of standing, because of loss of confidence. Now, we are in business, we have our money invested there, we have our business there, and we want to continue in business, we have been in business a great many years, and if this Court should say that we have been, this company sends into the city paper which is below the standards it will be very serious for us. It was very serious to the purchaser—it is as serious to the purchaser as any serious aspect that your Honors may give to it, and certainly more serious to us. Now, we learn of that, it hurts us materially, because our prestige with these people that are dealing with us—

Justice Caldwell: We recognize that, too.

Defendant's Counsel: Here in this case it would be the death knell of this corporation.

Justice Caldwell: It ought to be.

Defendant's Counsel: It should be, if your Honors find that this Invincible Company, or Mr. Lutz, who was the Invincible Company, had any knowledge of that. I don't claim any mercy for him because after all the buyers of the paper in turn pass it on to the wholesaler, and the wholesaler on to the retailer, and the consumer goes in there and assumes that he has a thousand sheets and finds that this paper has only 75 or 80 per cent of it, it would not be the kind of a case where I can appeal to the sympathies of the Court.

Justice Caldwell: In the last analysis, I think it amounts to stealing wholesale in a petit larceny way.

Defendant's Counsel: That's right.

The Court: Now, we are up to the point of whether we are going to find the company guilty, and the whole question involved is the question of whether this corporation defendant is chargeable with the knowledge that

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St. Paul, Minn.
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St. Louis, Mo.
Kansas City, Mo.
Joplin, Mo.
Atlanta, Ga.
Birmingham, Ala.
Jacksonville, Fla.
New Orleans, La.
Roswell, N. Mex.
Denver, Colo.
Salt Lake City, Utah
Phoenix, Ariz.
Los Angeles, Calif.
Charlotte, N. C.
Calgary, Alta., Can.
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it ought to have acquired because its officer was an officer in the corporation they purchased the paper from.

Defendant's Counsel: The circumstance under which he is an officer is quite clear to your Honors. He kept advancing money to these people to protect himself.

The Court: Have you any cases, that the lack of his knowledge would relieve his corporation of responsibility?

Defendent's Counsel: I think it is elementary.

The Court: Have you any cases?

Defendant's Counsel: I think it is elementary.

Justice Caldwell: You can't give us any cases on it? As far as I am concerned I vote guilty.

The Court: The Court is unanimous, we find the defendant guilty. Are you ready for sentence?

Defendants Counsel: We are ready.

The Court: We found the corporation guilty. There is only one defendant here?

Defendant's Counsel: Yes, sir.

Justice Nolan: Counselor, on the question of sentence, what are the assets of the Invincible Company that are going to be destroyed and ruined?

Defendant's Counsel: His assets?

Justice Nolan: Capital assets?

Defendant's Counsel: None. A good character?

Justice Nolan: You were very much alarmed about the damage that might be done. All that Mr. Lutz testified was that he practically had desk room. Where is all the cash money invested, where is the capital invested, that's what I am concerned with. You referred to it in arguing upon the Court the consideration of all these things. Why, they will just go out and change the name of the corporation, as they did the Litchfield Company and the other one.

Defendant's Counsel: We are not concerned with the Litchfield.

Justice Nolan: He was the president, wasn't he, of the Litchfield?

Defendant's Counsel: I wish you had them here instead of the poor, innocent sales agent. I wish you had them here.

Justice Voorhees: They wanted about twenty-five or thirty per cent.

Defendant's Counsel: The General Tissue Company.

Justice Nolan: No, the Invincible did.

Defendant's Counsel: The General Tissue, but your Honors should not make that statement as far as the Invincible is concerned. I wish you had the General Tissue here, I wish it was possible for you to deal with them.

Justice Voorhees: I don't want to deal with either of them.

Defendant's Counsel: I wish you could, had it within your power to imprison them, but I think what the Invincible Company here—

Justice Caldwell: If we had any evidence whatsoever that the officer actually had knowledge of the proceeding or that we could bring home to him knowledge, it might be a good thing to sit as a magistrate and make a complaint against him.

The Court: Under the circumstances the Court adjudges a fine of five hundred dollars against the defendant corporation.

Defendant's Counsel: Will you grant me a stay of thirty days? I want to appeal this. Will you give me a reasonable adjournment?

The Court: You can put up a bond and get your certificate of reasonable doubt.

Defendant's Counsel: Will you give me some time in which to get at this thing? I don't want to make it possible for the District Attorney to send the sheriff up there.

Justice Nolan: I am frank to say that the impression I get from the testimony in this case is that the public are the victims, I don't know that the complaining witness or the witness complaining is much better off than the Invincible.

Justice Voorhees: Let us look after the public's interests.

Justice Caldwell: A man who is honestly trying to do an honest business should not be connected with one who is doing business like this.

Defendant's Counsel: Will you grant me a stay of ten days?

The Court: No.

E. A. Smith Forms Engineering Sales Corp.

CLEVELAND, Ohio, May 10, 1926.—E. A. Smith, sales engineer, with the Hill Clutch Machine and Foundry Company, for the past ten years, is pleased to announce the formation of the Engineering Sales Corporation with offices located in the Perry-Payne building. As contracting engineers and distributors of industrial equipment, the new company offer prompt, efficient and economical sales and service covering the following lines: Power transmission machinery, elevating and conveying appliances; spur and worm gear reducers; I-beam trolleys, switches and cranes; electric and pneumatic hoists; handling, transportation, storage and production equipment; motors, belting, pulleys; ball bearings, flexible couplings, automatic belt tighteners; shafting and forgings; castings and machine work; surplus steel stocks; new and used machinery; millwright service.

Records of Arctic Expedition on Permanent Paper

The history-making accomplishment of Lieutenant-Commander Richard E. Byrd, United States Navy, in flying to the North Pole is of particular interest to the paper industry because of the precautions taken by the Government expedition to insure the durability and permanence of the party's maps and records.

Officials in charge of the expedition realized that the charts and other documents would have to withstand the most trying use Thep also recognized that the international importance of the records required that they be on paper of the utmost endurance and undoubted permanence. The drawings and reports made by the Arctic explorers will constitute the only known data of vast tracts and these facts will be of inestimable importance, not only to national and foreign governments, but also to scientific bodies throughout the world.

To the L. L. Brown Paper Company of Adams, Mass., went the honor of supplying the record and map paper for the Byrd Expeditaion. Much of the success of the expedition has been attributed to the extreme care exercised by Lieutenant-Commander Byrd in selecting the various materials alloted precious space in the aeroplane. Lieutenant-Commander Byrd personally selected Brown's Linen Ledger, Substance 36, for his maps and records. Accordingly, the original records on this historic expedition will go down to posterity on this well-known paper.

April News Print Statistics

Production in news print in the United States during April, 1926, according to the News Print Service Bureau, amounted to 145,327 tons and shipments to 144,600 tons. Production in Canada amounted to 151,739 tons and shipments to 154,015 tons, making a total United States and Canadian production of 297,066 tons and shipments of 298,615 tons. There were also 14,347 tons of news print made in Newfoundland with 1,005 tons made in Mexico, so that the total North American production in April, 1926 was 312,418 tons. The news print mills also made 377 tons of hanging paper in April, 96 tons of which were made in Canada.

During April the United States mills operated at 98.3 per cent of rated capacity and the Canadian mills at 98.5 per cent.

The United States mills made 11 per cent more in the first four months of 1926 than in the same period of 1925 and the Canadian mills made 18 per cent more than in the first four months of 1925.

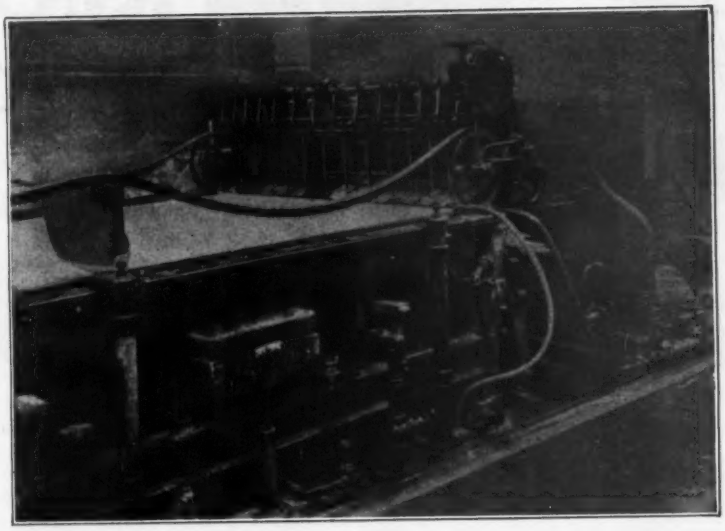
The combined production of the United States and Canadian mills in the first four months of 1926 was 14 per cent more than in same period of 1925.

Stocks of news print paper at United States mills totaled 19,478 tons at the end of April and at Canadian mills 12,415 tons, making a combined total of 31,893 tons, which was equivalent to 2.7 days' average production.

J. T. Carey Connected With Federation of Labor

ALBANY, N. Y., May 10, 1926.—Jeremiah T. Carey, who for eighteen years was president of the International Brotherhood of Papermakers, and who was succeeded about two years ago by Matthew H. Parker following a long drawn out and bitter court fight, is now connected with the New York State Federation of Labor with offices in this city. Mr. Carey who is widely known in every papermaking center in this country and Canada through his long association with the Papermakers' Union assumed his new duties recently. He will be employed in organization work and will be heard at meetings throughout the state speaking in the interests of organized labor.

Mr. Carey was quite badly injured more than a year ago in this city but is now fully recovered and is able to walk without a cane, the injury to his foot sustained in the accident having completely healed. Following his defeat for the presidency of the Brotherhood it was reported for a time that Mr. Carey might be named by Gov. Alfred E. Smith to a place on the State Industrial Council.



The Voith High Pressure Stock Inlet Makes Better Paper at a Greater Speed

1. **IT ASSURES PAPER OF UNIFORM CALIPER**
   Ordinary slices on a Fourdrinier machine result in irregular distribution when the stock is injected onto the wire. This causes irregularities in the caliper of the paper across the trim of the machine. Fine adjustments easily made on the Voith Inlet makes a sheet of uniform thickness across the entire width of the wire.
2. **HELPS TO ELIMINATE LUMPS AND FOAM SPOTS**
   Because the stock is dammed up and carried in a head above the wire there is a great deal of foaming. The Inlet mixes the stock and feeds it evenly onto the wire which helps to eliminate foaming and consequent lumps and foam spots.
3. **MORE FORMATION SURFACE ON THE WIRE**
   The usual long apron and slices are eliminated by the Voith Inlet. This gives an additional surface of two or three feet on the wire for formation purposes and results in a better sheet.
4. **WIRES LAST LONGER**
   By doing away with slices it is unnecessary to build up a head of stock on the wire itself, thus saving wear and tear on the wire and insuring a longer life.
5. **CUMBERSOME DECKLE WASHING PANS ELIMINATED**
   The Voith Inlet has a deckle washing device which washes the deckle at the point of the deckle pulley, thus omitting the cumbersome pans on the machine itself.
6. **INLET EASY TO OPERATE**
   Because it is easy to operate and adjust, it appeals strongly to the machine tenders and the operating force in the mill.
7. **THE MACHINE CAN BE SPEEDED UP**
   When ample drying capacity is available the patented Voith Inlet makes possible the speeding up of the machine, and increases production. In many mills this increase has amounted to ten per cent.

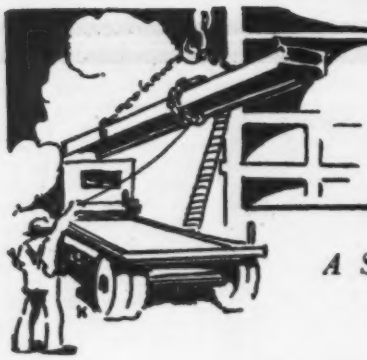
Write for Booklet

VALLEY IRON WORKS CO.

APPLETON, WISCONSIN

New York Office: 350 Madison Avenue

Specify Inlets in Your New Machine Contracts



CONSTRUCTION NEWS

A Summary of Vital Facts Regarding Construction, Finances and Operation of Paper Mills

Construction News

New York, N. Y.—Kimball & Company, 307 West Broadway, manufacturer of tags, labels, pin tickets, etc., are considering the erection of a new plant at 3-7 Wooster Street, to be eight-story, 65 x 100 feet, reported to cost in excess of $400,000, with equipment. It is said that an architect will soon be selected to prepare plans. G. A. Wallin, company address, is in charge.

West Dover, N. J.—Frederick Singer, Mountain Lakes, N. J., and associates have acquired the former local plant of the Singleton Silk Company, and plan to remodel and improve the structure for a new paper mill. Machinery will be installed at an early day for the production of transparent papers and affiliated specialties. The property was secured for a consideration stated at $50,000. It is purposed to organize a company to carry out the paper mill project.

Norfolk, Va.—The local mill of the Southern Fibre Company has been acquired by Louis Rosenstein, head of the Portsmouth Cotton Oil Refining Corporation, Portsmouth, Va., and associates, and will be converted for another line of manufacture.

Buffalo, N. Y.—The F. N. Burt Company, Ltd., 540 Seneca street, manufacturer of paper boxes and containers, will proceed with the immediate erection of its proposed new plant addition, for which a general contract has recently been awarded to the Metzgar Construction Company, 676 Genesee street. It will be six-story, 180 x 230 feet, reported to cost about $400,000, including machinery. Plumer & Mann, 700 Main Street, Buffalo, are architects. M. R. Cass is general manager.

Manistee, Mich.—The Chamber of Commerce, Manistee, is in negotiation with a paper bag manufacturing company, name temporarily withheld, which proposes to establish a local plant. The company is seeking an existing two-story building, which will be equipped to give employment to about 75 persons for initial operations. A list of machinery to be installed will soon be arranged.

Salem, Ore.—The Oregon Pulp and Paper Company has secured a permit for the construction of the proposed new addition to its pulp mill on South Commercial street, estimated to cost $225,000, with equipment, and will proceed with the work at an early date. A general contract was awarded recently to Cuyler Van Patten, 430 South 21st street, Salem.

Pomona, Cal.—The California Fruit Wrapping Mills, Inc., (care of R. L. Knox, secretary of the San Antonio Growers Exchange, Pomona,) recently organized to construct and operate a local mill for the manufacture of special paper wrappers for citrus fruits, is perfecting plans for the early erection of the plant on site selected at Third and Reservoir Streets. A list of machinery to be installed has been arranged and a portion of the equipment, it is understood, ordered. Eric Fernstrom is one of the heads of the company.

Somerville, Mass.—The Agar Manufacturing Corporation, Medford, Mass., manufacturer of corrugated paper boxes and containers, has acquired property in the vicinity of Clyde and Warwick Streets, totaling about 135,000 sq. ft. of ground area, and has preliminary plans under way for the erection of a new plant at this location, reported to cost approximately $200,000, with equipment. The main plant of the company is at Whippany, N. J.

Middle Falls, N. Y.—The Mohican Pulp and Paper Company is said to be planning the early rebuilding of the portion of its local pulp mills destroyed by fire, May 11, with loss estimated at close to $22,000, including equipment.

San Antonio, Tex.—Fire recently destroyed a portion of the one-story storage and distributing plant of the Alamo Paper Stock Company, with loss estimated at close to $50,000, including building and stock. It is planned to reestablish the warehouse at an early date.

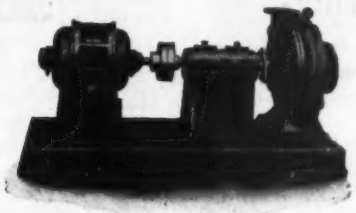
Parkersburg, W. Va.—The Parkersburg Corrugated Box Company, 1722 Avery street, George McDonald, president, recently formed, is in the market for equipment for its proposed new local plant on Depot street, and expects to make purchases at an early date. The structure will be 100 x 200 ft., and is estimated to cost close to $65,000.

Lyons Falls, N. Y.—The Gould Paper Company has preliminary plans under consideration for the rebuilding of the portion of its local mill destroyed by fire, May 8, including buildings and machinery. Practically the entire plant, including power house, was demolished. A heavy quantity of finished paper stock will also lost in the fire.

New Westminster, B. C.—The Canadian Scottish Paper Company, Ltd., has begun work on initial buildings for its proposed local plant and will push to completion. Two structures will be erected, including a one-story coating mill, 55 x 220 feet, and power house, 30 x 40 feet, estimated to cost close to $50,000, with equipment. Other buildings will be constructed later. C. F. Robinson is in charge of the project.

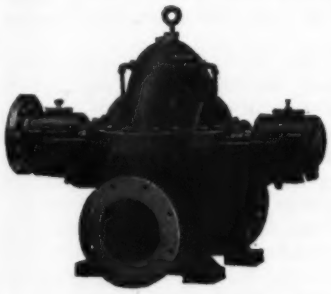
Fort Lauderdale, Fla.—Tne Fort Launderdale Paper and Bag Company, recently formed with a capital of $100,000, has acquired property in the Chateau Park Terminal district and plans the erection of a new plant at this location, comprising a main one-story mill unit, 60 x 170 feet, to be equipped for the production of paper bags, as well as for the manufacture of cartons, paper cups, etc., with section devoted to wrapping papers. The plant is reported to cost about $75,000 with machinery. J. Harrison McCready is president.

Karihaara, Finland—A company at Karihaara, Finland, has preliminary plans for a new local mill for the production of sulphite pulp, to be equipped for an initial output of about 20,000 tons per annum. The company is now operating similar plants in this section. Information at the office of the Bureau of Foreign and Domestic Commerce, Washington, D. C., reference Finland 35X. Emil Kekich, Helsingfors, Finland, assistant trade commissioner, has transmitted the data to the bureau.



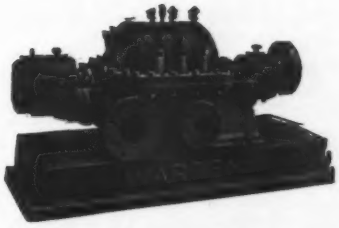
Warren Single Stage, Single Suction Heavy Duty Centrifugal Pump.

WARREN PUMPS



Warren Single Stage, Double Suction Pump.

for



Warren Balanced Type Multi-Stage Pump for high pressure service.

PAPER MILLS

For whatever purpose you select a Warren Pump you may be certain that it was designed, built and tested for the particular service requirements by engineers who know pulp and paper mill requirements.

For twenty-seven years the Warren Steam Pump Company has devoted its entire energies and resources to the development of pumps that assure true economy, operating and maintenance costs considered.

If you agree with us that pump ***performance*** is what counts, you will be interested in knowing more about Warren Pulp and Paper Mill Pumps. May we send you full information?

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New York Trade Jottings

G. A. Ware, of the News Print Service Bureau, has returned to headquarters after inspecting the Wisconsin mills.

* * *

Ernest G. Griggs, president of the St. Paul and Tacoma Lumber Company, of Tacoma, Wash., is in New York this week.

* * *

R. O. Sweezey, vice-president of the Port Alfred Pulp and Paper Company, of Montreal, Que., was in New York early in the week.

* * *

H. O. Keay, manager of the research department of the Laurentide Company, Ltd., of Grand Mere, Que., was a New York visitor last week.

* * *

L. J. Parant, general manager of the St. Croix Paper Company, of Woodlands, Me., was a prominent visitor in New York last week.

* * *

R. H. Laftman, general manager of the Bogalusa Paper Company, of Bogalusa, La., is scheduled to sail for Sweden today, Thursday, from New York.

* * *

G. K. Spence, chief engineering chemist of the New York and Pennsylvania Company, of Johnsonburg, Pa., visited his friends in the local paper industry last week.

* * *

D. A. Crocker, forester, of the American Paper and Pulp Association, who has been in the South for some time, is scheduled to return to headquarters about May 24.

* * *

The regular luncheon meeting of the Salesmen's Association of the Paper Industry was held last Monday, at the Town Hall Club, New York, when general business conditions were discussed to the enlightenment of those present.

* * *

Robson Black, manager of the Canadian Forestry Association, of Ottawa, Canada, a large and growing organization which is accomplishing efficient and important work, and his wife, are spending a few days in New York this week.

* * *

The Bloch Brothers Paper Company, Inc., announce their removal to 99 Greene street, New York, where they are in a position to serve their customers with an even greater degree of satisfaction than in the past, due to larger quarters and greater facilities.

* * *

Dr. Hugh P. Baker, secretary, and D. A. Crocker, forester, of the American Paper and Pulp Association, conferred with Axel Oxholm, director of the National Wood Waste Committee, in Washington, D. C., last week, in connection with the paper work to be done by that committee.

Mohican Ground Wood Mill Burns

[FROM OUR REGULAR CORRESPONDENT]

GREENWICH, N. Y., May 17, 1926.—The Ide Paper Mill at Middle Falls, leased by the Mohican Pulp and Paper Company, was burned to the ground early this week by fire of unascertained origin. The mill has not been in operation for about two years. The fire, coming close upon a series of incendiary blazes in this vicinity during the last two weeks has led to the report that the paper mill fire was of incendiary origin. Authorities throughout this section are making an exhaustive search for the fire bugs who are believed to be responsible for the fires.

The destroyed mill was of brick construction and was known as a two-grinder mill. When in operation it manufactured ground wood pulp. The machinery and equipment of the plant was owned by the Mohican Pulp and Paper Company and the building by the Consolidated Electric Company, of Greenwich. The Mohican Company operated the plant until 1924 when it was closed down. The entire equipment of the mill was destroyed beyond salvage. It is understood that the Mohican Pulp and Paper Company is covered by insurance.

The plant was one of the oldest pulp mills in Northern New York having been in operation for more than 50 years securing water power from Middle Falls. Whether the mill will be rebuilt is not known at this time. The site with its water power facilities is a valuable one and it is thought likely that another mill will be rebuilt at the Middle Falls location.

Bids and Awards for Government Paper

[FROM OUR REGULAR CORRESPONDENT]

WASHINGTON, D. C. May 19, 1926.—The Government Printing Office has received the following bids for 36,000 pounds Binders' Board, 25 x 30, No. 30: Mathers-Lamm Paper Company, $72.50 per ton; R. P. Andrews Paper Company, $71.20; Whitaker Paper Company, $72.00; Dobler & Mudge, $71.50; Lindemeyr & Harker, $72.23; The Davey Company, $68.00; Barton, Duer & Koch Paper Company, $68.00; C. B. Hewitt & Bros. Inc., $72.20; The Holliston Mills, Inc., $72.25; and Aldine Paper Mills, Inc., $72.50 less 1 per cent.

The Printing Office also has received the following bids for 100,000 Fine White Writing Envelopes, 3¼ x 6¼,—No. 28: Charles W. Beers & Co., $6.50 per thousand; Eaton, Crane & Pike Company, $5.20 Dobler & Mudge, $5.15; R. P. Andrews Paper Company, $9.84 and R. Carter Ballantyne, $5.20.

The Government Printing Office will receive bids on May 21 for 1000 sheets of 22 x 28, gray Melton board.

The Maurice O'Meara Paper Company has been awarded the contract for furnishing the Government Printing Office with 10,000 pounds (10,000 sheets) of 26 x 38,—No. 50 strawboard at 2.45 cents per pound, bids for which were received on May 3.

Dobler & Mudge will furnish 36,000 pounds (20,000 sheets) of various sizes No. 2 quality binders board at $72.75 per ton, bids for which were received on April 26.

The R. P. Andrews Paper Company will furnish 20,405 pounds (265,000 sheets) of 19 x 24, white M. F. lithograph printing paper at 6.85 cents per pound, bids for which were received on April 21.

Men Wanted for Paper Section

The Bureau of Standards is considering increasing the personnel of the paper section. It has under consideration research on paper celluloses which would require the services of a thoroughly trained chemist, preferably with experience in this or an allied line of work. Other researches contemplated may require two junior paper technologists, preferably with training in paper laboratory work. One of these would be employed in testing work, both routine and research, and the other would assist in the paper making researches carried on in the paper mill.

Those interested in applying for such positions should communicate with the Civil Service Commission, Washington, D. C., requesting announcement and application blank. The date of receipt of applications for junior paper technologist will close May 29, 1926, and for assistant and associate chemist on June 22, 1926.

The Bureau is anxious to reach as many qualified applicants as possible and would appreciate it if you would be willing to run a short news item in the next issue of your journal.

Brown Co. Has Patent on Kraft Toweling

The PAPER TRADE JOURNAL wishes to correct a statement which appeared in the April 15th issue wherein it was mentioned that the only kraft toweling on the market was manufactured by the Bay West Paper Company.

The Brown Company, of Portland, Me., has an exclusive patent on toweling made from sulphate kraft pulp and any concern placing a kraft toweling on the market is doing so under a license agreement with the Brown Company.

TORONTO DEMAND IMPROVES

(*Continued from page 28*)

of the proposed 500-ton paper mill. Originally it was planned that both the sulphite plant and the paper mill would be located at Xapuskasing. It is now reported that the matter has been reconsidered by the Spruce Falls Company and as a result the paper mill may be located at Smoky Falls where power for operating both paper and sulphite mills will be developed. Arising from the uncertainty some delay has occurred in starting construction work. The right of way for the proposed railway to Smoky Falls has been completed and grading will be the next stage of the programme. Labor at present in Kapuskasing is very plentiful. Three men are reported available for every single job.

Plant Sold by Auction

The plant and equipment of the Ross Can Company, Limited, manufacturers of metallic and fibre containers, Bowmanville, Ont., has been sold in detail by public auction on instructions of the Trust and Guarantee Company. The plant has not been in operation for some months. The machinery, tools, ties, etc., were valued at $114,000.

Notes and Jottings of the Industry

H. A. Goldsbrough, of the Hodge-Sheriff Paper Company, Toronto, has returned from an extended business trip throughout Western Ontario going as far as the Coast. He reports that business conditions are steadily improving and that a spirit of optimism prevails among the members of the trade. The demand for kraft paper is increasing all the while.

Robert Brown, manager of the Canadian-Nashua Paper Company, Peterborough, Ont., spent a few days in Toronto last week calling upon the trade.

Mr. Murphy, of the Fraser Companies, Edmundston, N. B., was in Toronto last week on business introducing the wrapping paper lines of the organization.

S. F. Duncan, Treasurer of the Provincial Paper Mills, Toronto, and W. J. Trimble, contractor, Toronto, were in Port Arthur last week making arrangements for starting construction on the new buildings of the company who will install a second machine in that division this season.

Work was begun this week on the new strawboard mill, of the Hinde & Dauch Paper Company, at Trenton, Ont. The plant will cost about three quarters of a million dollars and will have a capacity of fifty tons daily.

Empire Paper Co. To Open at Wichita Falls

[FROM OUR REGULAR CORRESPONDENT]

WICHITA FALLS, Tex., May 15, 1926.—Another step in the progress of Wichita Falls as a wholesale and jobbing center was made Saturday with the announcement by George Gutzman and C. H. Gannon of the opening for business in the near future of the Empire Paper Company, a large wholesale paper house, here.

A deal has been closed with an experienced paper man who will be actively in charge of the concern. Mr. Gutzman and Mr. Gannon, both of whom are associated with the Southwestern Glass and Paint Company, are officers in the new concern, but will not be active in the management.

The owners of the new concern are now contracting for stock and machinery, and plan to be ready for opening June 17. Machinery for doing their own printing on paper which they sell will be installed in the new plant. The plant will be modern in every way and will be equipped at a cost of approximately $30,000.

The new firm will deal in wrapping paper, bags, boxes and all kinds of paper for which there is a demand. In addition to meeting the demand of the Wichita Falls trade, they will maintain a traveling sales force to cover this trade territory.

Location for the new concern has not been decided upon definitely. Mr. Gutzman said Saturday that several locations were being considered and a contract for quarters would be closed within the next week.

With the opening of this concern a large volume of business of this kind which has heretofore been handled in Dallas, Fort Worth and Oklahoma City will be handled through the local house, it is said.

L. J. Estes is president of the new company and will be in active charge of the business. Mr. Estes was formerly connected with the Continental Paper and Bag Mills Corporation for a number of years as manager of that concern's Dallas branch.

Ohio Paper Men to Attend Waste Disposal Meeting

[FROM OUR REGULAR CORRESPONDENT]

DAYTON, Ohio, May 17, 1926.—Considerable interest has been expressed by members of the Miami Valley Paper Manufacturers' Association in any movement which will result in a more satisfactory disposal of mill liquors and waste materials in the streams of this and other localities. It is no surprise, therefore, that many members of the Ohio section of the American Chemical Society expect to attend a regional meeting of the organization at Madison, Wis., May 28-29.

Approximately 400 chemists from nine states will attend and one of the speakers will be Prof. H. A. Schuette of the University of Wisconsin.

It is understood here that one of the principal topics to be discussed will be the disposal of mill wastes, in an effort to check the pollution of streams, a subject which has been to the fore in Ohio for a number of years, yet one which never has been satisfactorily solved to all interests.

To Have Charge of New Erie City Iron Works Office

[FROM OUR REGULAR CORRESPONDENT]

ERIE, Pa., May 17, 1926.—Henry C. Hill will be in charge of the new office of the Erie City Iron Works just opened in Cincinnati.

Mr. Hill is a native of Ohio, was born in Dayton, Ohio, but has spent the bulk of his life in Cincinnati. He represents the third generation of engineers, and is the son of John W. Hill, the hydraulic and sanitary engineer, who by the way is one of the oldest living members of the American Society of Civil Engineers.

For twenty-five years Henry C. Hill has been associated with his father in the design and construction of municipal engineering projects, in over 100 cities; and with as many private corporations on special engineering investigations; and during that period has had an exceptional opportunity of running the gamut of office and field work; in drafting: designing: estimating: valuations: laboratory and research work, and constructive engineering.

The largest single works that came under their joint supervision was the general improvement of the Philadelphia, Pa., water works, filters, etc., costing over $30,000,000.

Phoenix Paper Co. Files Bankruptcy Petition

[FROM OUR REGULAR CORRESPONDENT]

GLENS FALLS, N. Y., May 17, 1926.—The Phoenix Paper Company, of Battenville, Washington county, last week filed a voluntary petition in bankruptcy in Federal Court at Utica. Liabilities are listed at 349,970 with assets of $352,816, mostly real estate and equipment. The petition was filed through Attorneys Lunmore, Ferris & Dewey, of Utica. The petition was signed by A. H. Wilcox as president of the company. The Citizens' Trust Company, of Utica, is a secured creditor, holding a mortgage of $95,000 as trustee for bonds and a mortgage for $78,000 which was assigned to it and secured by notes totaling $107,000. A. James Eckert, of Utica, has a claim for $15,000 while the J. J. Towne Coal Company claims $528 and the Utica Mutual Insurance Company $1161. Other creditors include A. W. Wilcox, $5,905; Whiteside and Buell, of Greenwich, $344; E. M. Sargent of Battenville, $6,209; Baker Manufacturing Company of Saratoga Springs, $389; Newton & Hill, of Fort Edward, $506.

PAPER TRADE JOURNAL
ESTABLISHED 1872
With Which Is Combined
PAPERMAKER
The Magazine of the Paper Industry
HENRY J. BERGER, Editor

Member A. B. C. Audit Bureau of Circulations

Vol. LXXXII New York, May 20, 1926 No. 20

FOREST PRODUCTS APPROPRIATIONS

The strong support given the proposal of the National Forestry Program Committee for more adequate Federal appropriations for forest products investigations, mentioned in the Committee's letters of October 3rd and 31st and subsequent correspondence, has borne fruit.

It will be recalled that the Bureau of the Budget estimated for the fiscal year beginning July 1, 1926, the sum of $368,264 for forest products activities, which represented a reduction from this year's appropriation of $15,000.

Due almost wholly to the effective assistance rendered the National Forestry Program Committee by the large number of interested organizations and individuals among the timber and wood-using industries, Mr. R. S. Kellogg, chairman of the committee, states that this cut of $15,000 in the estimates was restored by the House Appropriation Committee and subsequently approved by the House.

The added pressure brought to bear upon the Senate for a reasonable increase in this amount of work next year brought about recommendation by the Senate Appropriations Committee for an increase of $20,000 over the amount passed by the House; and this increased appropriation was approved by the Senate.

By the continued efforts of this same group in the timber and wood-using industries, the Joint Committee of the House and Senate gave its approval to the Senate increase of $20,000, and the Conference Report on the Agricultural Appropriation Bill has now re-passed both the House and the Senate. The result is that $20,000 more for forest products investigations becomes available next year than was allotted this year, and $35,000 more than was given by the Budget.

This represents a substantial accomplishment by those interested in forest products investigations, and while the amount secured falls far short of the $205,000 additional originally requested, it illustrates what coordinated effort can achieve.

With the total of $403,264 thus appropriated the Forest Products Laboratory will be able to continue the necessary research on fundamental problems which have been reasonably financed during the past year and initiate or expand, but only in a small way, investigations on such phases as ready cut stock, second growth, short and odd lengths and widths of lumber, joints and fastenings, containers, blue stain, service records, seasoning, green and dry construction, pulp mill waste, white pulp, turpentine, etc.

With the foundation thus laid this year, the National Forestry Program Committee is confident that next year the larger appropriation, urgently needed by those industries for forest products investigations, can be secured. It is hoped that when the time comes you will be willing to offer the same strong support to the undertaking that you have the past year.

GREATER APPLICATION OF POWER

The unparalleled increase in the manufacturing efficiency of American industry since pre-war days, easily the most phenomenal economic development since England's "industrial revolution" in the 18th century, has set a pace with which Europe and the rest of the world find it hard to compete.

The volume of production in 1923, according to an analysis of industrial productivity in the United States made by the National Industrial Conference Board, 247 Park Ave., New York, was 33 percent greater per wage earner than it had been in 1914, and required 25 percent less labor, 13 percent less power and 17 percent less management personnel per unit of production, and 7 percent less actual working time per man.

This achievement of American industry has attracted world-wide attention and has created a situation in which the traditional American problem of meeting the competition of European "pauper labor" is being overshadowed by Europe's curiosity as to the secret of American industry's ability to pay wages that are the envy of the workmen of all other countries. Despite the much higher wages paid by American manufacturers, we are in increasing degree capturing foreign markets, and in many cases successfully compete with foreign makers in their home markets. While our exports of manufactured goods averaged $654,000,000 a year during 1910-14, the average for 1921-25 was $1,565,000,000, and the total value of our exported manufactured goods during 1925 was $1,843,000,000 or nearly three times the pre-war average. Whereas formerly American industrialists were wont to visit Europe to study manufacturing methods there, European industrialists now flock to the United States in increasing numbers to study American production methods.

The explanation of our increased industrial productivity, according to the Conference Board's study, is largely to be found in the greater application of power, more intensive mechanization and increased managerial efficiency. In 1923, 16 percent more primary installed power was back of each worker in American factories than in 1914, correspondingly increasing his productive capacity and making possible the higher wage level. The cost of labor during the same period increased along with, but in greater proportion than production, for labor cost per wage earner per month in 1923 was 36 percent greater than it had been in 1914, against a production increase of 33 percent, and although 25 percent less labor was required per unit of production in 1923 than in 1914, the total amount of wages paid for an equal amount of production was still nearly 2 percent higher. The cost of management, on the other hand, or the total of salaries paid to management personnel, decreased 12 percent from 1914 to 1923 per unit of production.

Detailed study of conditions in ten major industries in the United States show an almost universal expansion of production since 1914, greatly intensified of course by the extraordinary demands during the war years, but exceeded even since, and accompanied by a proportionate increase in the use of power and mechanization in the process of manufacturing. From 1914 to 1923, production, in terms of value added by manufacture, in the ten industries covered by the Board's study increased as follows: In the cotton industry, nearly 100 percent; woolen and worsted goods, about 110 percent; silk manufacture, about 63 percent; rubber products, about 113 percent; lumber and allied products, 50 percent; paper and wood pulp, 80 percent; metals and metal products, 80 percent; iron and steel, about 100 percent; electrical machinery, about 170 percent; automobile industry about 250 percent.

Weatherford Paper Co. Starts at Chattanooga

[FROM OUR REGULAR CORRESPONDENT]

CHATTANOOGA, Tenn., May 10, 1926.—The Weatherford Paper company has just been organized to do a wholesale paper business and will open May 15 at 1146 Market street.

The company is composed of W. H. Weatherford, president, and V. D. Weatherford, secretary and treasurer. These brothers are pioneers in the paper business in Chattanooga. As a boy, W. H. Weatherford was traveling salesman for the old Deardorff Paper and Manufacturing company. In 1894 he organized the Archer Paper company and devoted most of his time to making it a successful business, although he has many other business interests. Four years ago he retired from the Archer Paper company and devoted his time to fishing and hunting in Florida. He said to a newspaper man: "Now I'm caught up on my fishing. I figured I had lost in all my years of work, just about four years of good fishing. Now I'm caught up on my fishing and I'm ready to get busy again."

V. D. Weatherford has also been actively identified with the Archer Paper company up till now as a director of the company and its leading salesman.

The Weatherford Paper company will offer many new methods and ideas in their new business.

To Start Work on Paper Mill at Pomona

[FROM OUR REGULAR CORRESPONDENT]

LOS ANGELES, Cal., May 6, 1926.—Eric Fernstorm, controlling owner of the California Fruit Wrapping Mills, Inc., accompanied by Albert Ortendahl, consulting engineer, arrived at Pomona, Cal., a few days ago from Sweden. It is reported from Pomona that construction will start immediately upon the $500,000 paper mill which it was recently announced would be built at that place. Local men interested in the project have made all the financing arrangements necessary to beginning work at once on the 5-acre site on Third street and the Reservoir. Machinery for printing the wrappers has been ordered from the east and the special machinery for reducing the raw pulp has been ordered from a concern in Karlsbad, Sweden. It is expected the plant will be ready for operation late in 1926 or early in 1927.

Puget Sound Paper Box Co. in New Quarters

[FROM OUR REGULAR CORRESPONDENT]

SEATTLE, Washington., May 14, 1926—The Puget Sound Paper Box Co. has removed from 2518 Western Ave. to 707 Snoqualmie St., Seattle. The company's growing business has necessitated taking larger quarters to enable it to uphold its reputation for service and quality.

The firm believes that it now has the largest and best equipped set-up box factory in the west, now occupying 37,500 square feet of floor space.

Providing for the Future

"Of the many problems of manufacturing companies," says an editorial in the International Monthly, "one of the most important is the provision of continuous supplies of raw materials for their mills. In securing a reserve of this chief raw material, pulpwood, the pulp and paper industry for example has to meet and overcome many difficulties with which few industries are confronted. And in addition, the cutting of the wood from year to year and its delivery to mills involve in themselves many important details which are proportionate to the size of the organizaion.

"Pulpwood is not a commodity which can be bought in large quantities in the spot markets. If wood is wanted, it must be cut in advance by the manufacturers themselves, or under arrangements they make with suppliers. And as in many cases there are no other suppliers, and it is risky at best to rely on a source which might at any time be diverted to a competitor, paper companies must acquire forests and plan their cutting programs for years in advance.

A paper company the size of the International Paper Company must control its own sources of supply, and must have forests of adequate size from which to draw the large quantities of wood used annually by it. In order to operate its forests economically and with a view to perpetuating the supply of wood, the Company plans its cutting programs scientifically and over a period of many years.

"It was with these factors in view that the Company recently acquired about 376 square miles of Crown timber limits in the Ste. Anne des Monts River basin in the Gaspe peninsula on the south shore of the St. Lawrence River, as an additional source of supply for its enlarged Three Rivers Mill. The limits are well timbered and well located for this purpose. They represent an exceptionally well concentrated block of timber which will be operated on a sustained annual yield basis.

"The doubling of the Three Rivers Mill, by the addition of four machines, to a daily capacity in excess of 700 tons of news print, is progressing satisfactorily. Operation of machines 5 and 6 began in February and March of this year, and the mill has now in operation six machines with a daily capacity of over 500 tons of news print paper—thus making it the largest paper mill in the St. Maurice Valley. It is expected that machines 7 and 8 will be in operation before the end of this month, and the mill will then be the largest paper mill in the world."

Cottontex Co. Reconditioning Plant

[FROM OUR REGULAR CORRESPONDENT]

HOLYOKE, Mass., May 10, 1926.—Thomas Johnson, of this city, is superintending the moving of the machinery and equipment of the Rainbow Paper Company, of Windsor, Conn., bought by the new Cottontex Products Company, which is reconditioning the tissue paper plant at Burnside, Conn., formerly conducted by the Hartford Tissue Mills, to the Cottontex plant

Extensive alterations are being made at Burnside to facilitate the manufacturing, converting and packing of sanitary surgical dressings made from wood pulp and cotton and which are now being placed on the market. An output of about six tons a week is expected and it is stated that an offer has already been made to contract for one million pounds of their product by one firm. A graduate nurse will be in charge of the girls of the main staff of the mill to assure hygienic conditions in the packing of the surgical dressirgs.

La Motte Chemical Products Co. Elects Officers

[FROM OUR REGULAR CORRESPONDENT]

BALTIMORE, Md., May 17, 1926.—At the recent annual meeting of the board of directors of the La Motte Chemical Products Company, the following officers were elected: President, W. A. Taylor; Vice-President and Treasurer, F. W. Burr; Secretary and Assistant Treasurer, Miriam Welch.

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Conducted by W.G.MacNAUGHTON, Secretary

Common Sense Applied to Paper and Board Machine Drier Drainage

By A. E. Broughton *

Drier drainage is really a very simple operation to be so universally misunderstood. Just because the inside of a drier cannot be seen and cannot be felt, has brought about literally hundreds of theories as to what actually takes place. Each different system or scheme controlling the evacuation of driers has been built up on some hypothesis where some engineer has assumed that certain conditions take place, and builds his system to satisfy his assumed conditions. For instance, it has been assumed that air collects in driers during their operation while they are under steam pressure. If one starts to calculate the quantity of air contained in steam and the amount of steam a drier consumes and does this with a correct interpretation of science as we know it today, he would be greatly surprised how far wrong he is. Another assumption is, that air and steam mix. This again is wrong. Another wrong assumption is, that steam under velocity will give out more heat than steam that is not moving. And still another is, that the driers become coated with oil on the inside. The greatest error of them all is that it requires constant velocity through the siphon pipes to lift the water out of driers.

Air in the Driers

According to our best chemical analysis by leading chemists of the country, it has been established that under ordinary average operating conditions, steam will not contain more than 5 to 8 parts of air in one million. Let us take a concrete example of a drier 4 feet in diameter by 10 feet long. This drier has a normal water rate of about 300 pounds per hour which would be really high for the ordinary papermachine. This would represent in a week's run, assuming that the machine started up on Monday and ran right straight through until Sunday or a period of six days or 144 hours time, a total of about 43,200 pounds of steam used in that drier. Figuring this back at the rate of 8 parts of air in a million of steam, results in approximately 1/3 lb. of air collected per week in that particular drier. Air is approximately twice as heavy as steam, or in other words, if a cubic foot of steam at 10 lb. pressure weight approximately 3/10 of a pound, a cubic foot of air under the same pressure in that same steam would weigh approximately 6/10 of a pound. In other words, 1/3 of a pound of air would really represent about ½ cubic foot under 10 lbs. pressure and since this drier contains approximately 130 cubic feet, it can be readily seen that this collection of air over a full week's run is not appreciable, and it is problematical where a papermachine could run this long without being shut down for some cause. The figures which have been given are not to be taken literally for they are simply the means on which to base a crude estimate. If one were to figure this accurately, the air collection would be considerably less than this which has been roughly estimated.

Mixture of Stream and Air

Do air and steam mix when one is twice as heavy as the other and where the turmoil or mixing action is at a minimum? This has been a very much discussed question by drainage engineers. It is my firm and steadfast belief that they do not. True, it is easy to produce a situation of turmoil in a drier whereby the difference in weight between steam and air can be overcome by the disturbance of steam rushing in and out. Again, does this steam rushing out carry the air with it in situations like this? If there were two weights lying on the floor in front of you and one is just twice as heavy as the other and you are forced to pick up one of the other of these two weights, it is obviously natural to pick up the lighter one. Let us emphasize the word "natural" for it applies in general engineering far more than many engineers recognize. Following up this simile, and with the steam rushing from a siphon pipe, I again am absolutely convinced that the air and water, particularly the water, are pushed to the side and the siphon pipe monopolized by the steam until that condition of water backing up becomes so great as to overcome the difference in the lifting weight of the three fluids, steam, water and air, and crushes down into the siphon opening, rushing out of the drier in a slug forming an intermittent evacuation. Many people believe that turmoil in the drier is caused by the circular motion of the drier itself. The only way this could be accomplished would be by the skin friction between the iron and the fluids being great enough to move the entire mass. This is hard to believe since the steam is being used and converted into water rapidly with new steam replacing it constantly in a direction neutral to the motion of the drier itself. In other words, the mass of gas in the drier is being constantly changed and thereby its initial inertia does not have time to be overcome and its direction of movement changed.

Effect of Steam Velocity

Steam has just so much heat to give out and the nearer to saturation the steam, the faster will be the heat removal. Steam under rapid motion cannot contain as much saturation as steam quiescent. Assuming the condition in a drier with all the water and air re-

* Engineer associated with Healy-Ruff Co., St. Paul, Minn.

moved and steam entering only as fast as radiation is consuming it and the pressure maintained, and we will have a drier that will do more actual work than if you forced that steam through it at a rate of 2,000 or more feet per minute. Siphon pipes are about 1 in. or less, in diameter, and, in those systems requiring it, a velocity of anywhere from 2,000 to 10,000 feet per minute is maintained. This velocity, however, is in the siphon pipe and when one calculates the cubic contents of the drier and how fast the steam is changed in it due to a 10,000 foot per minute velocity through the siphon pipe, it will show a flow of steam through the drier itself of probably in the neighborhood of 20 feet per minute. It is claimed that these high velocity systems wipe off the inside of the drier, and yet it is hard to assume how much wiping action takes place with steam moving past at the rate of 18 to 20 feet per minute. It would be really detrimental to wipe off the surface inside a drier, for the water particles that collect on the surface form a natural saturating element for the steam and really speed up the action of latent heat removal.

Oil Film

I have heard many paper men talk of the oil film that collects in driers. Personally, I have looked into many paper machines and have yet to find any drier coated with oil. There has been plenty of it in the lines outside the driers, but it seems that the water rolling on the bottom is, in itself, scrubbing the oil film off continually and removing it through the siphon pipe and return system where the same scrubbing action is not maintained and where the oil then deposits. This is my own personal experience and there may be isolated cases where conditions are so bad that this situation really does happen.

There are two methods of looking at drier drainage based upon the fact that the water and air must be removed. One of these is where a situation is brought about by which through mechanics the water and air is drawn out, or in other words, we are manufacturing the method. An ordinary drier is condensing about 300 pounds of steam per hour. A ¾ or one inch pipe flowing constantly will carry that much water away easily in from 2 to 5 minutes' time. In other words, the mechanical method, which includes all recirculating schemes or blow-through systems, is really blowing steam for at least 55 out of every 60 minutes. Again, if the siphon pipe is restricted to some imaginary point where the restricted opening is supposed to be equivalent to the exact amount of condensate as it is made minute by minute, it seems impossible to foresee just how the air can get away through this restricted opening which is supposed to be monopolized by water all the time.

The other method is, and here is where we use the word "natural" again, where we permit nature to accomplish that, behind which we would otherwise put mechanics. The difference between these two methods is, that with mechanics we have either a continuous operation with a resulting waste in steam or a throttled operation with resulting machine-locking, but with nature the operation takes place only at those times when it is necessary and to any degree that it is required.

"Let Nature Do It"

The Broughton System can be explained in four words. "Let Nature do it." With this system all the air is taken out of the driers at the beginning of their operation. It permits the use only of that steam in each drier which that drier will consume and not one ounce can escape. All air and water is removed from the drier instantly and without the use of any man-made mechanics whatsoever, simply "letting nature do it."

Summer Courses in Paper Making

The University of Maine, Orono, Me., announces that as during many previous years it will conduct a number of courses in chemistry and pulp and paper manufacture from June 28 to August 6, 1926. The courses include the following:

Paper Technology

A lecture course on pulp manufacturing processes including equipment used, raw materials, flow of materials, etc. using TAPPI Text Books, Volumes III, IV, and V.

Pulp Manufacture

Soda Processes—Inspection and sorting of chips, preparation and analysis of caustic liquor, cooking charge calculations, cooking operation and controls, screening the pulp, determination of yield, bleach requirements, strength testing.

Sulphite Process—Preparation of acid and its analysis, the cooking operation and control, determination of relief and sulphur recovery, stock washing and screening, bleach requirements, determination of yield, calculation of sulphur and lime consumption, strength testing.

Sulphate Process—Testing of liquors, determination of yield, stream consumption, consumption of chemicals, etc.

Mechanical Process—Lectures with mill demonstrations.

Pulp Bleaching

Determination of bleach required for standard color, determination of rate of bleaching under varying conditions, the effect of stock concentration, agitation and temperature, determination of oxycellulose, determination of chlorine and permanganate numbers, etc.

Paper Manufacturing

Laboratory Work—Beating, sizing, loading, coloring, slowness test, treatment of water, raw materials, examination of papermakers' supplies.

A study of properties and application of the various classes of aniline dyes and pigments used in paper coloring.

Paper Testing and Analysis

All of the important methods of the Technical Association of the Pulp and Paper Industry will be considered.

The courses in pulp and paper during the summer are designed to meet the specific needs of students who desire and are qualified to take pulp and paper courses and pulp and paper mill men, with or without technical training, who have had practical experience and desire to gain a scientific understanding of the important phases of pulp and paper manufacture and testing or phases of work with which they are unfamiliar.

Visits to Pulp and Paper Mills

The summer work is in charge of Dr. C. A. Brautlecht, professor of chemistry, and the pulp and paper courses will be given by Paul DeCosta Bray, associate professor of chemistry in charge of pulp and paper work, who was for eight years chemist and assistant sulphite superintendent of the Katahdin Division of the Eastern Manufacturing Company. He will be assisted by A. B. Cutler, assistant instructor in paper chemistry and paper technology. In addition, if there is sufficient demand, other paper specialists will be obtained to give lectures on specific pulp and paper topics. Visits to all kinds of pulp and paper mills in the vicinity of Orono will be made on Saturdays. These will include groundwood, soda, bleached and unbleached sulphite and kraft pulp mills, as well as newsprint, specialty, fine writing and kraft paper mills.

Those interested in taking these courses should write at once to make reservations, to Prof. C. A. Brautlecht, Chemistry Department, University of Maine, Orono, Maine.

Paperboard and Its Manufacture*-XII

By A. W. Bragg and R. H. Harding

(*Continued from the Issue of the Paper Trade Journal of May 13, 1926*)

Preliminary Treatment of Paper Stock

The next point to be considered is that of the preliminary treatment of waste paper stock.

It may be said that the ideal system of preparing and defibering waste paper stocks has not yet been developed; nevertheless systems in use today are infinitely superior in efficiency to general practice in board mills of ten or fifteen years ago. As was brought out in the installment of this series (PAPER TRADE JOURNAL, Nov. 5, 1925) modern board mill practice in the preparation of waste paper stocks takes account of the fact that a large part of the stock has already been beaten, and consequently, the problem is not one of careful beating but rather of disintegrating and breaking up the old papers while leaving the fiber length as long as possible. Any cutting necessary is left to the jordans or refiners. There is also the development of the idea of removing the defibered stock from the beater or breaker as fast as it is produced, allowing new stock to be constantly fed into it, giving, in effect, a continuous breaker, or defibering unit.

The types of systems used to prepare the waste paper stock are many, and depend on previous equipment already installed, the grades being made, and the policy and production necessities. There are, in general, two distinct methods or policies of preparing waste papers for making new papers and paperboards:

1. That consisting in general, of defibering the paper, removing more or less of the dirt, refuse, etc., by auxiliary equipment or previous dusting and sorting. With this treatment, the ink, coloring matter, etc., are left in the pulp, the resultant stock being grey in color.

2. That consisting in general of both defibering and deinking or decolorizing the stock. Such a system, properly designed, installed and operated, will deliver pulp of various degrees of whiteness depending on the extent to which it is desired to carry the treatment as well as on the kinds of raw stock used.

In general, mixed papers and the lower grades of waste paper stocks are treated according to the first scheme; while the second treatment—used to a large extent by book mills—is also used to some extent by paperboard mills making the higher grades such as patent-coated, bristols, etc.

It might be mentioned as a general rule that small amounts of defibered, printed papers such as newspapers, can be used into board in small amounts, as up to 10 or 15 per cent, without seriously detracting from the appearance of any except the very highest quality groundwood boards. In such cases, however, it is imperative that the defibering be perfect, otherwise printed letters and undefibered pieces of paper will show in the sheet. During the post-war period, printed waste paper was quite extensively used, but with a corresponding decrease in quality, amounts as high as 30 or 40 per cent of old newspapers having been used in board commonly supposed to be made only of fresh, new groundwood pulp.

It should also be mentioned that there is a good field for the deinking of old newspapers for the manufacture of groundwood-sulphite pulp mixture, in board mills using much groundwood, although this work is not being carried out in any mill, to the writer's knowledge, at the present time. This should be especially attractive in Southern mills, where fresh groundwood pulp is expensive.

In the case of a 100 per cent groundwood sheet, the introduction of deinked newspaper pulp will increase the strength, due to the sulphite present in it, and for all practical purposes, the product will be fully as good as if all new pulp were used.

It should be noted that the deinking operation not only removes the ink and color to a very large degree, but also removes the sizing, alum and any other chemicals which may have been in the original paper.

Except for the color, undeinked pulp probably makes considerably better paper than if deinked, because of the sizing, alum, etc. left in it.

Simple Defibering

There will first be considered the systems used for preliminary treatment of waste papers, which defiber only.

Broadly, the means for defibering and cleaning waste paper pulp fall into two general classes:

1. Those systems which consist of some equipment attached to a beater, which extract the pulp already defibered and remove it from the beater as fast as made.

2. Those systems which use equipment especially designed for the purpose, the beaters not being used for breaking and extraction purposes.

The applicability of the first scheme is much simpler, and requires much less capital investment than the second. However, no change is made in the layout of the mill and there is probably no reduction in labor cost, at least in comparison with equipment of the second class properly located with respect to the point of waste paper stock receipt into the mill. The question of the quality of the mixed papers or news stock received also has an important bearing on the matter, as the disposal of large amounts of refuse from beaters of the first class becomes difficult. The second class of equipment can handle the roughest and poorest quality of dump stock, so far as removal of the refuse and foreign matter is concerned; while the second class of equipment cannot usually be equipped with rifflers and thickeners to remove this refuse and must therefore use a cleaner stock if dirt is at all objectionable in the sheet.

Various Systems Required

The grades of product made have a very important bearing on the type of system which can be used, as well as previous equipment already installed, mill policies, and production necessities. For example, a mill making nothing but plain chip or newsboard would need only a breaker beater system feeding a chest, this chest in turn discharging directly to jordans, or to either a mixing system or beaters in case the addition of size and alum were necessary. As a rule, however, the usual board mill must add size, alum, color, other pulp and waste papers of higher grades to their furnish; and some means of introducing these materials into the stock must be used. The point of discharge of the defibered pulp from the breaker beaters depends on the system used in the mill. If a one way system, this would be to all the beaters; and if a two or three way system, to either the filler, or to both the filler and bottom liner beaters or mixing tanks, as desired. Flexibility in a board mill is most important nowadays, in order that as many grades as possible may be made efficiently; and this consideration will have a bearing on the flow-sheet of the defibered slush stock decided upon.

The plan of passing the mixed paper stock through one or two breakers, and thence to beaters of the hollander or fast circulating type is perhaps the most common and efficient way of

TECHNICAL SECTION, PAGE 246

* Previous installments of Paperboard and its manufacture appeared as follows: I. Paper, June 26, 1924; II. Paper, July 10, 1924; III. Paper, Sept. 18, 1924; IV. Paper, Oct. 30, 1924; V. Paper, Nov. 20, 1924; VI. Paper, Jan. 8, 1925; VII. Paper Trade J., Apr. 9, 1925; VII. (Cont'd) Paper Trade J., May 14, 1925; VIII. Paper Trade J., June 18, 1925; IX. Paper Trade J., Aug. 13, 1925; X. Paper Trade J., Nov. 5, 1925; XI. Paper Trade J., May 13, 1926.

handling stock in test board mills where the pulp and stronger waste papers must be brushed out and beaten to get the necessary test. In this way, the actual beating on the stronger stock can be done before the mixed paper slush is furnished, which is then beaten just enough to jordan well. This system is also coming into extensive use in patent coated, folding boxboard mills, the breaker beater, riffler and thickener system being used for the news pulp instead of for mixed papers.

The other systems in use consist of hydrating tank systems, in which the waste paper stock is treated in rotary boilers with hot water, and then passed over rifflers and thickeners; the use of beaters alone for defibering waste papers; the use of breaker beaters discharging direct to secondary beaters without the use of rifflers or thickeners; and the use of beaters equipped with extractors or continuous beater attachments. The specific systems using these methods will be discussed at some length.

In general, it may be said that for mills using systems of breaker beaters or hydrating tanks, with rifflers for removing refuse and thickeners for thickening and further purifying the stock, preliminary sorting and dusting of the mixed papers is not necessary or advisable. For mills relying on beaters with continuous extracting equipment, using breaker beaters discharging to beaters without rifflers, and those using beaters alone, if clean mixed paper stock is not obtainable some means of cleaning is advisable. Even here, it is questionable whether it would not pay in the end to install a modern breaker beater system, if the tonnage warrants.

At the present time, the board mills making the cheaper grades do not sort the paper stock, as it has been found that the benefits derived thereby do not offset the cost of sorting and the attention which must be given it. Some of the higher class mills do sort their paper stock packings, and the prevalence of such operations in almost direct ratio with the grades of the products made.

To obtain clean mixed papers, dusters should be used to shake out pins, nails, type, sawdust, matches, and other small pieces that under ordinary conditions are not apparent to the eye. The papers are then passed over a sorting belt to remove rags, strings, tin cans, old shoes, cigar boxes, etc. The cost of picking out the larger pieces of foreign material will be more than offset by the decreased wear on the jordans, beaters, stuff pumps and screen plates.

A conveyor system which has proven satisfactory for handling paper stock direct from cars to beaters is arranged as follows: Three sections of conveyors are used, one dumping into the next, so that the papers may tumble and turn over two or three times loosening up the dirt which passes through perforations in the bottoms of the conveyors and falling into boxes or bins placed underneath to receive it. These conveyors are made long enough and so arranged that sorters placed on each side, pick out the rubbish and the higher grades of stock, which can either be sold or used in the mill when making stronger products. The third or last conveyor can be arranged with down spouts leading to the different beaters, which enables the beater man to divert the paper supply to any beater desired.

An efficient modification of this system is the use of a cylindrical wire screen duster made by the Logemann Co. of Milwaukee, Wis. This gives the papers a thorough shaking up and loosening of the refuse, the bales being furnished into the cylinder in large wads.

This equipment is very rugged, requires but a little power to operate and will reduce the number of sorters necessary on the belts which follow and into which the cylinder discharges the loosened papers. The finer dirt and refuse falls through the large wire meshes of the cylinder, the larger pieces of foreign material being picked out from the loosened paper on the conveyor as in the first instance.

One board mill in the Kalamazoo Valley formerly purchased their own "country pack" and by the use of a single, long belt conveyor sorted out the higher grades of stock which were baled and sold to the nearby book mills. As will be explained later, these mill must be particularly careful that groundwood papers do not get into the deinking cooking tanks; so a spray of aniline sulphate was used to detect such paper.

The systems for defibering the waste paper stock according to the two general methods enumerated before, will now be considered in some detail. The enumeration and description given while probably not including all the systems, is thought to be fairly complete and comprise most of the systems and appliances in use today.

The systems of the second class—especially designed for breaking, defibering and cleaning the stock will now be considered.

One of the well known systems of this class is that of Shartle Bros. Machine Co., Middletown, Ohio. Briefly, this system consists of furnishing the paper stock to a large breaker beater from which the defibered stock passes through ¾ inch holes in the backfall, due to the centrifugal force exerted by the revolving breaker roll. The stock then passes out the side into a head box which controls the flow from the beater. From the head box the stock is pumped over a settling trough or riffle. This riffle should be long enough to insure the complete sedimentation of pins, wire stitches, and miscellaneous dirt. This settling effect is rendered more effective by the addition of water at the head box. The lighter materials will float at the top of the stock and may be skimmed off with appropriate skimming equipment.

From the settling trough or riffle, the stock passes to one or more thickeners or feltless wet machines which remove the excess water and discharge the thickened stock into a storage chest from which it is pumped to the secondary beaters or to the jordans as desired. The water removed at the thickeners is sent to a white water chest from which it is returned to the head box of the riffles and used as diluting water, thus making this part of the system a closed one. The chest which receives the stock from the thickeners is of large capacity, preferably not less than 12x24 ft. and should be made easily accessible for cleaning. The stock is either pumped from this chest through a direct line to the beaters or to a secondary tank on the floor above the beaters from which it will flow to them by gravity.

The equipment is very rugged and is made sufficiently heavy to stand severe abuse. The breaker itself has a long concrete tub, made as long as possible and at the same time maintain satisfactory circulation. On systems handling up to 100 tons per 24 hours, tubs about 45 ft. long are used and over that tonnage the length jumps to approximately 75 feet. These tubs are also made of cast iron for special installations.

The accompanying views show a recent installation and also the type of roll used. This has either 18 or 24 bars, according to the size of the roll, the bars being either 1 x 10 inches, or 1 x 12 inches. The roll is carried in self-aligning, shock-absorbing bearings and the shaft is only carried to the hollow midfeather instead of across the entire beater. The bearings are water cooled and no adjustment is provided for raising or lowering the roll. The shaft carrying the roll is extra heavy, usually not less than 12 in. diameter. The roll is usually carried from 6 to 8 inches from the bottom of the tub, and no bed plate is used.

The tub is located in the mill primarily with regard to the labor saving which can be effected. As a general rule, with this system, while power is saved, it is small compared with the saving in the labor costs. These savings are effected both by the design of the breaker and its proper location. The necessity for the first is obvious; and it is also obvious that the breaker should be located as close to the source of supply as possible. It is rather immaterial if this location is several hundred feet away from the secondary beating equipment as stock can be pumped much more cheaply than it can be trucked. The top of the breaker tubs are set a few inches above the floor line. This

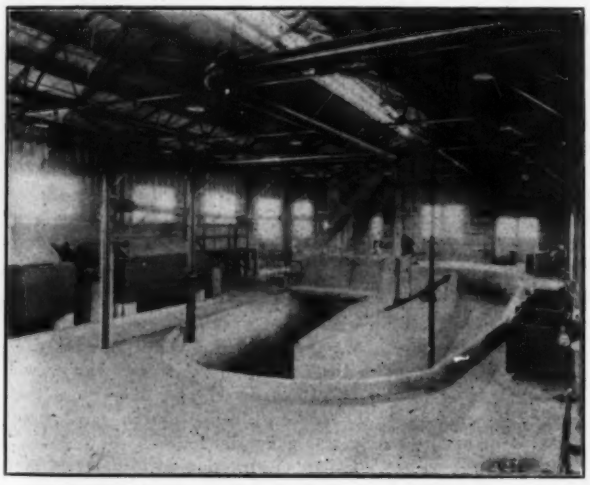
facilitates charging the breaker, as the operator does not have to do any lifting and consequently one man can easily feed from 40 to 50 tons per 24 hours, directly from the truck. The tub is therefore placed in the warehouse, as near to the railroad siding used for unloading the papers, as possible, to minimize trucking. The large, or 75 ft. tub, holds about 9 tons of stock, the purpose of carrying such a large amount of stock being to allow it to remain in the breaker a long time so that it will be thoroughly defibered and disintegrated. The stock is charged in large parcels, a 1000 lb. bale being charged in three parcels of about 300 lbs. each.

There is a large amount of refuse in mixed paper stocks as received and the problem of cleaning out this refuse is an important one. To accomplish this, the breaker is with a rugged quick-operating rag catcher so as to easily remove the accumulated refuse once every two or three hours. The cleaning of the bottom of the tub is also important. This is done by having a large gate in the side of the beater and at the lowest point, so that the foreign materials which have accumulated can be shovelled through this opening into trucks. The provision of making the tubs as long as possible also facilitates removal of refuse, by providing plenty of room for the foreign materials to settle.

With a small continuous beater, lack of uniformity in consistency has been something of a problem. With a large capacity beater and special chests, this variation is minimized although it would seem advisable to equip this chest with some sort of consistency regulator.

The perforated back-fall, under the roll, is of the Brownell-Bushler type. The pump taking the stock from the controlling head box to the settling trough is a 24 x 28 inch single plunger pump or a triplex type, depending on conditions.

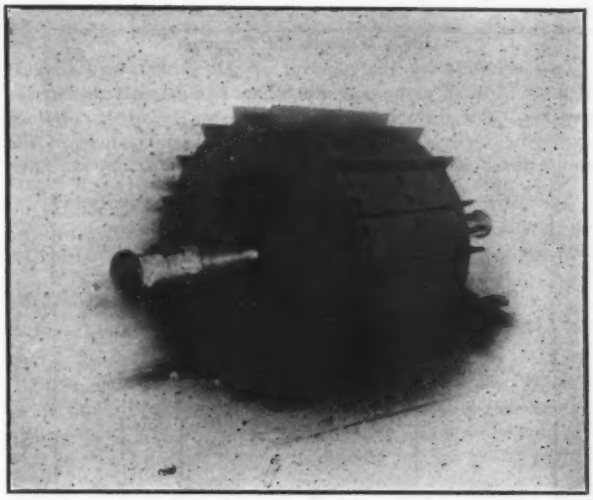
The settling trough or riffle varies with the installation and with the cleanliness of the stock desired. It is usually from 48 to 60 inches wide, 24 to 36 inches deep, and 60 to 150 feet long,



SHARTLE BREAKER BEATER SYSTEM

and is equipped with dams, placed at frequent intervals, to gently agitate the flowing stock. In some cases, the last 10 to 20 feet of the settling trough has a felt covered bottom, the object of this felt covering being to entangle the finely divided particles of metal and dirt which would otherwise slide along with the stock. This felt covering offers one drawback, that of being difficult to keep clean. Unless cleaned frequently, it becomes slimy and the purpose for which it is intended is defeated. The thickener, into which the settled stock discharges, both thicken the stock and maintain it at the proper consistency.

Installations of the Shartle breaker beater have been made which do not use the settling trough and thickeners. In such cases the power requirements are of course considerably lower. The real criterion after all, is in what shape is the stock prepared? If it is not free from foreign materials, it is evident that considerable more power will be required in the secondary beating equipment, since for a stock in which there is no foreign material is much easier to brush out. The real answer will be found in the total power requirements necessary to produce a given amount of a certain quality of board.



SHOWING CONSTRUCTION OF ROLL

As to power, the average power consumed is from 1 to 1¼ hp. per ton of board. This figure is assuming that hot water will be furnished in sufficient quantities. This hot water should be in the neighborhood of 160 deg. Fahr. and this is true even where it is desired to size the board and therefore not desirable to have the stock too hot. By using the settling trough and thickeners the stock can be couched at a very heavy consistency and sufficient cold water added at that point to bring the stock to a temperature low enough to size properly.

The space required for this sytem depends on tonnage requirement but it is stated to require much less than the old method of beating stock. No more water is required than is used in the ordinary beaters; this holds true with all continuous beater or breaker systems.

Data on Power Used

The following data regarding the power used on a large installation of this system is given by the manufacturers.

Monday	5120 kw.	Thursday	4480 kw.
Tuesday	4480 kw.	Friday	5120 kw.
Wednesday	3840 kw.	Saturday	4480 kw.

The above figures are the total kilowatt hours used in the breaker department for each day of 24 hours, to produce an average of 170,000 lbs. of dry paper stock.

The power figure of 4500 kw. Hrs. per day input is equal to 251.3 Hp. An estimate of the power required on each of the machines in the Breaker Beater system is as follows:

Breaker Beater	150-170 hp.
S. T. Pump	10-15 hp.
Thickeners	15-20 hp.
Fan Pump	40-50 hp.
Agitator	10-10 hp.
B. R. Pump	20-25 hp.

The variation in the power used depends on the number of starts made in one day, operating at different capacites.

(To be continued)

Recovery of Paraffin Coated Waste Papers

John G. L. Caulfield and Prof. Paul D. Bray *

A simple and inexpensive method for removing the paraffin coating from clippings obtained in the manufacture of drinking cups and similar articles is of interest. The stock coated is generally a good grade of bleached sulphite, well worth reworking for use as a constitutent in cheaper furnishes.

Two Methods for Removal

Two methods for the removal of the paraffin will suggest themselves, first, extraction with some paraffin solvent such as gasoline, chloroform or ether; second, by the action of heat, employing boiling water or steam, to take advantage of the low melting point of paraffin. Preliminary experiments have

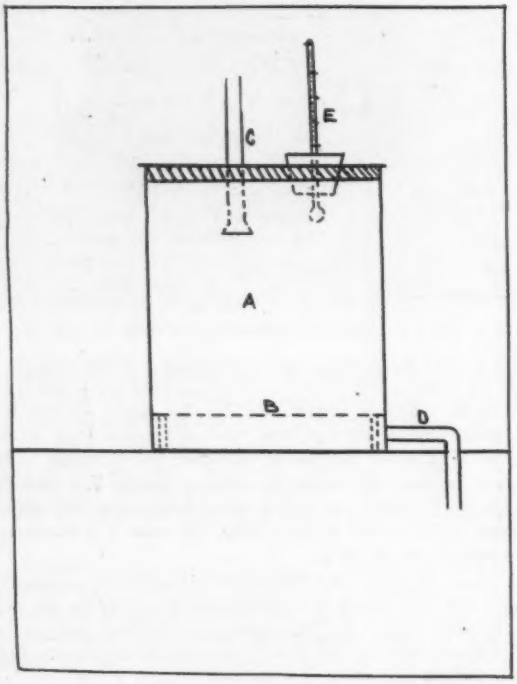


FIG. 1

shown that it is by the first method only that complete removal of the coating can be effected. However, for all practical purposes the second method yields a product that is entirely satisfactory, and it is so simple and inexpensive in operation that it presents many advantages. It may readily be seen that the use of volatile, combustible, and more or less expensive solvents, the recovery of which would be necessary if the process were to be commercially practicable, presents difficulties that would not be met if low quality steam, generally available in most plants, could be employed.

The Apparatus

Since preliminary experiments proved that the paraffin coating could be removed to a satisfactory degree by the use of steam, the simple piece of apparatus shown in the attached sketch (Fig. 1) was set up and a number of runs made. Referring to the sketch (A) was a cylindrical tin plated about 15 inches in height and 10 inches in diameter. It was fitted with a false bottom (B) of tin plate, perforated with a number of holes one-half inch in diameter, and was placed about an inch above the bottom of the tower. Steam was admitted through the pipe (C) which extended through the tight fitting cover. There was an outlet pipe (D) for condensed steam, and (E) a thermometer for determining the temperature within the tower.

The paraffin coated stock employed was found to contain 30 per cent. paraffin, which is as heavy a coating as is commonly met with and the furnish was one hundred per cent. bleached sulfite. Steam at 105 deg. cent. was used, the same as that supplied to the laboratory steam bath. Since paraffin melts at about 72 deg. cent., this gave a sufficient degree of heat.

Procedure Adopted as Standard

After a number of runs had been made to determine the time required and what subsequent washing was necessary, the following procedure was adopted as the standard for stock of this weight of coating, and with this particular piece of apparatus:

The clippings were cut or torn into pieces about an inch square and the tower lightly packed to within an inch of the top, which brought the level just below the opening of the steam inlet. The cover was put in place and steam admitted. after enough condensed steam and melted paraffin carried down through the tower with it had collected to reach the level of the outlet pipe, the steam supply was so regulated as to maintain a temperature of 90 deg. Cent. within the apparatus. By collection and measurement of the condensate, the rate of flow was found to be 100 cc. per minute, or about 11 pounds of steam per hour. The progress of the extraction was conveniently followed by allowing a few cubic centimeters of condensate from the outlet tube to drop into cold water and observing the amount of paraffin solidified. At the end of 3 hours the condensate was found to contain little paraffin, and the steam supply was shut off. Examination of the contents of the tower after cooling showed that a certain proportion of the coating still remained on the clippings, not evenly distributed over the surface, but in loosely adhering flakes. This condition was particularly true at the top of the tower, and was evidently due to the quantity of condensed steam being insufficient to carry the melted paraffin to the bottom of the apparatus.

The condensed steam which had been collected was found to have a temperature above the melting point of paraffin, and a quantity about equal to the volume of the tower was drawn from the bottom of the collection vessel and once more run through the apparatus, the contents being at the same time stirred. One such washing was generally found to be sufficient to remove the loosened coating. Extraction of samples of the clippings with chloroform showed only traces of paraffin remaining after the washing operation was completed.

The stock thus treated was broken up in a smaller beater and made into hand sheets after sizing with 2 per cent rosin and 3 per cent alum. The sheets, although composed entirely of re-worked stock, showed no evidence of paraffin, and were sized perfectly.

Commercial Application

The commercial application of this method would, it is hoped, provide a practical and profitable means of salvage for the large quantities of paraffin coated waste papers which accumulate every year.

* University of Maine Pulp and Paper School, Department of Chemistry and Chemical Engineering.

Paper Research Literature, VII (Revised)

1ST SUPPLEMENT

A List of the Contributions by Members of the U. S. Bureau of Standards, Department of Commerce, 1925

By C. J. West and B. W. Scribner

Carson, F. T.

Testing paper for permeability to liquids.

Paper Trade J. 80, No. 10, 59-62 (Mar. 5, 1925); Paper Makers' Mo. J. 63, No. 6, 209-212; No. 7, 261-262 (June, July, 1925); Paper Maker, Export No., 1925, p. 95-97, 110.

A general discussion of the testing of paper for permeability to liquids followed by a description of such testing methods developed by the Bureau. These include a dye-sugar indicator method for degree of sizing; the use of ground glass as a detector of moisture; an absorption test; and a method of testing permeability to organic liquids.

Carson, F. T.

An extractor and friction cleanser.

Paper Trade J. 80, No. 12, 53-54 (Mar. 19, 1925); Paper 35, No. 17, 39-40 (Feb. 12, 1925); World's Paper Trade Rev. 83, No. 20, 1630 (May 15, 1925).

Description is given of an apparatus designed to remove surface coatings from carbon paper and other similar papers. This is of service where it is desired to obtain the basic paper in good condition for testing or where quantitative determination of coating and impregnating materials is desired.

Lofton, R. E.

The glarimeter and the measurement of the finish of paper.

Paper Trade J. 80, No. 7, 47-49 (Feb. 12, 1925); No. 16, 58 (April 16, 1925); Paper 35, No. 17, 132, 134, 136 (Feb. 12, 1925); Zellstoff und Papier 5, No. 6, 216 (June, 1925); World's Paper Trade Rev. 83, No. 20, 1660 (May 15, 1925).

Results are given of a study of the application of the Ingersoll Glarimeter to measurement of degree of finish of paper. It is concluded that the instrument is suitable for this purpose. The method of calibrating the instrument and the procedure to follow in using it are described.

Scribner, B. W.

Research of the Bureau of Standards on paper during the fiscal year 1923-24.

Paper Trade J. 80, No. 3, 34, 36, 38, 40, 68 (Jan. 15, 1925).

A brief description of each of the researches made, together with an outline of the general functions of the bureau and of the paper section.

Scribner, B. W.

Recent paper research of the Bureau of Standards.

Paper Trade J. 81, No. 13, 51-56 (Sept. 24, 1925).

Scribner, B. W.

Standards for paper towels.

U. S. Bureau of Standards Circular No. 294 (Nov. 17, 1925), 5 p.

Recommendations are made in respect to methods of test, simplification of sizes, basis for expression of weight, unit of payment and unit of packaging. Specifications are suggested for towels suitable for general use.

Shaw, M. B.

Hydrogen ion concentration in the paper mill.

Paper Trade J. 81, No. 10, 59-62 (Sept. 3, 1925).

A discussion of the application of hydrogen ion concentration determinations to control of sizing and other papermaking processes. It is shown that such method of control gives superior results in respect to both quality of paper produced and economy of material.

Shaw, M. B., and Rumsey, R. R.

Caroa fiber as a papermaking material.

Paper Trade J. 80, No. 2, 47-49 (Jan. 8, 1925).

Reports the results of papermaking tests of fibers from the caroa plant, which is native to South America. While the experiments were on a laboratory scale only, they indicate that these fibers maye be used as a substitute for rope or rag fibers.

Shaw, M. B., Bicking, G. W., and Rumsey, R. R.

Cotton stalks as papermaking material.

Paper Trade J. 81, No. 5, 50-51 (July 30, 1925); World's Paper Trade Rev. 84, No. 21, 1634, 1636 (Nov. 20, 1925).

Severe chemical treatment and long cooking time were required for pulping. The yield of fiber was good but the paper had poor quality, being suitable only for low grade wrapping or board. The results indicate that this material is not commercially feasible for making paper, at least if the ordinary paper-making methods are used.

Shaw, M. B., Bicking, G. W., and Rumsey, R. R.

Esparto as a papermaking material.

Paper Trade J. 81, No. 12, 55-56 (Sept. 17, 1925).

Paper-making tests were made on a semi-commercial scale of a partially pulped stock being offered for import from abroad. It yielded 57 to 63 per cent of easy bleaching pulp suitable for book and other papers of similar nature, a mild cooking treatment being required. The fiber was appreciably stronger than that of soda wood pulp, approaching sulphite wood fiber in strength.

Shaw, M. B. and Bicking, G. W.

A comparative study of paper fillers.

U. S. Bureau of Standards, Technologic Paper No. 301, Dec. 5, 1925; vol. 19, 733-748 (1925).

Commercial paper fillers consisting of asbestine, talc, clay, crown filler and gypsum, were studied to determine their comparative paper-making value, the tests being made in the semi-commercial Bureau mill. The chief difference found was in degree of retention. Due to greater solubility of crown filler and gypsum, they gave lower retentions in the paper than the other materials. The paper-making processes were not adversely affected by any of the materials used. Values for chemical composition and physical characteristics are included for each material.

West, C. J., and Scribner, B. W.

Paper research literature, VII (Revised). A list of contributions by members of the U. S. Bureau of Standards, Department of Commerce, 1910 to December 31, 1924.

Paper Trade J. 80, No. 21, 46-52 (May 21, 1925).

A complete bibliography of all publications of the Bureau relating to paper to January 1, 1925. A brief abstract of each publication is included.

TECHNICAL SECTION, PAGE 250

Current Paper Trade Literature

Abstracts of Articles and Notes of Papermaking Inventions Compiled by the Committee on Abstracts of Literature of the Technical Association of the Paper Making Industry

Clarence J. West, Chairman

For the Manufacture of Sulphite Pulp. Anon. Pappers Och Träva Ru-Tidskrift för Finland, No. 11 (1925); Papierfabr. 23, 623-624 (Sept. 27, 1925). Pinus maritimus possesses fibers which approximate 3 mm. in length and 0.04 mm. in thickness and is suitable for paper manufacture. The average yield of sulphite pulp from 4 cooks was 35.7 per cent calculated on the weight of the wood. Compare C. A. 19, 3162 (1925). Also in Zellstoff u. Papier, 5, 307 (Aug., 1925).—J. L. P.

The Relation Between Cooking Conditions and Yield and Quality of Sulphite Wood Pulp. R. N. Miller. Paper Mill 49, No. 41, 4, 22-26, 30 (Oct. 10, 1925). A description of the effects of penetration of the chips by the acid, circulation in the digester, time and temperature of cooking and acid composition from the standpoint of yield and quality of pulp.—A. P.-C.

Soluble Sulphites and Their Bisulphites in the Pulping of Wood. John D. Rue. Paper Trade J. 81, No. 16, 54-56 (Oct. 15, 1925). A review of the literature and patents.—A. P.-C.

Wood Pulping Process. C. F. Cross and A. Engelstad. Eng. pat. 229,992, Nov. 15,1923. An increased yield of wood pulp and an improved quality of soluble by-products are obtained by adding 0.1 to 0.5 per cent of ammonia or ammonium sulphite or carbonate to the digesting liquor used in the process of Eng. pat. 202,016. —A. P.-C.

Process of the Indirect Heating of Cooking Acid for Pulp Digestion. E. Morterud. Ger. pat. 413,269. Papierfabr. 23,505 (Aug. 2, 1925). The cooking acid in a pulp digester is circulated through a container outside the apparatus. This container is provided for heating the liquid.—J. L. P.

Cymene. F. Koenig. Papierfabr. 23, 501-502 (Aug. 2, 1925). Of the 8-12 kg. cymene which are formed from a ton of sulphite pulp, only about one-tenth is obtained in the crude condition. The sulphurous acid was removed from the cymene mixture by shaking with bicarbonate solution and after several hours standing the oil separates from the water and can be siphoned off. The crude cymene was distilled and the resulting distillate up to 200° C was redistilled over sodium. Fractionation was carried out under reduced pressure to 240° C. and 60 mm. The first fraction, yielding 38.6 per cent and distilling at 174 to 178° C., and 740 mm., consisted mostly of para-cymene. In all, six fractions were made; the residue was a brown resin and amounted to 25.9 per cent of the cymene used. Crude cymene was also neutralized and distilled with steam, yielding 47.2 per cent distillate (specific gravity at 20° C. 0.867), and 52.8 per cent residue (specific gravity 0.99). Fractionation of the distillate gave a 76.6 per cent yield cymene boiling at 173 to 177.5° C.—J. L. P.

Evaporation of Waste Sulphite Liquor. F. Koenig. Papierfabr. 23, 544-545 (Aug. 23, 1925). Waste sulphite liquor before or after neutralization and after being heated by waste heat from the mill, is evaporated by exposing a large surface to the atmosphere and sun, as in a salt works.—J. L. P.

Waste Sulphite Liquor in the Manufacture of Tanning Material. Farbwerke v. Lucius u. Bruning. Ger. pat. 414,270. Zellstoff U. Papier, 5, 367 (Sept. 1925). Tanning material is produced from a mixture of dry powdered waste sulphite liquor and a waste product from lignite, made by treating this material with nitric acid.—J. L. P.

Process of Treating Waste Magnesium Monosulphite Cooking Liquors. V. Drewsen assignor to West Virginia Pulp & Paper Co. U. S. pat. 1,549,189, Aug. 11, 1925. The waste liquor is boiled with powdered, slaked, dolimitic lime to precipitate magnesium hydroxide, and the latter is treated with sulphur dioxide to make magnesium monosulphite liquor cooking liquor. —A.P.-C.

Sulphite Waste Liquor as a Protective Colloid. E. C. Bingham, G. F. Rolland and G. E. Hilbert. Ind. Eng. Chem. 17, 952-953 (Sept. 1925). Purified sulphite waste liquor has noteworthy properties as a protective colloid rendering stable many suspensions, emulsions, foams, and changing the so-called "wetting power" of many substances. This should have applications in insecticides, pharmaceutical preparations, paints, ceramics, etc. It owes its property of a protective colloid to its high adhesion for many solid substances. This same quality gives it remarkable properties as a lubricant. It is possible that the saponins present may be effective.—A. P.-C.

Absorbent or Fuel-Carbon From Sulphite Waste Liquor. C. G. Schwalbe, Eng. pat. 228,512, Jan. 30, 1924. Sulphite waste liquor is carbonized in presence of a sustance "having a large surface development," such as adsorbent charcoal, clay, or kieselguhr, to which a small amount of acid may be added, e. g., hydrochloric acid. Methanol may be recovered as a by-product.—A. P.-C.

Utilizing Waste Gases from Pulp Digesters. H. Koch assignor to International Precipitation Co. U. S. pat. 1,554,581, Sept. 22, 1925. The gas is maintained at a sufficiently high temperature to prevent condensation of water and is subjected to an electrical precipitating operation is such a manner that the organic material which it contains is separated.—A. P.-C.

Composite Roofing and Method of Manufacturing Same. J. Logan. U. S. pats. 1,551,317 and 1, 551,318, Aug. 25, 1925. No. 1,-551,317—the patent covers roofing material comprising a sheet of felt impregnated with light asphalt, with a layer of heavy asphalt on each side and a relatively thin sheet of copper veneer covering a portion of one of the layers of heavy asphalt and imbedded into it a distance substantially equal to the thickness of the veneer. No. 1,551,318 covers the method of manufacture of this product.—A. P. C.

Process of Making Colored Waterproof Felt. L. Kirschbraun. U. S. pat. 1,549,991, Aug. 18, 1925. The fiber is dyed the required color, and the dry colored felt is then passed through a saturating tank containing heated wax tailings, which will not obscure the predetermined color of the fibers.—A. P. C.

Safety Paper. W. G. Hay and Wiggins Teape & Co. Fr. pat. 590,012. Two or more kinds of stocks, or stocks of two or more colors, are fed on to the wire so as to form parallel streams or sheets which are divided by narrow deckle straps. The latter do not extend the full length of the table, so that when the stock has passed the deckle straps the various sheets widen out somewhat and form a single sheet of the full width of the machine deckle.—A. P. C.

Method of and Means for Impregnating a Sheet of Material with liquid. C. W. Morden assignor to Crown Willamette Paper Co. U. S. pat. 1,547,513, July 28, 1925. The liquid is atomized into a floating fog in a chamber which is open at the top, and the material to be impregnated is placed over the chamber so as to close it, and is therefore exposed to the action of the "fog" but does not receive any deposit by gravity.—A. P. C.

Making Roofing Material. H. A. Cumfer assignor to Guyton and Cumfer Mfg. Co. U. S. pat. 1,552,421, Sept. 8, 1925. The process consists essentially in subjecting a roofing felt consecutively and continuously to the following operations, heating to drive out moisture, saturating with a liquid waterproofing material, cooling to partially set the saturating liquid, coating both sides with a relatively plastic material coating both sides with finely divided material, and cooling,—A. P. C.

Non-Conducting Composition Board. D. C. Lohmann. U. S. pat. 1, 554,358, Sept. 22, 1925. A composition board suitable for use as a lining for buildings, etc., is made to contain from 50 to 60 lbs. of paper pulp, 25 to 75 lbs. of clay, and 2 to 12 lbs. of wheat flour.—A. P. C.

Transfer Sheet. J. A. L. Muller assignor to Standard Products Corporation. U. S. Pat. 1,544,675, July 7, 1925. A coating of transfer material is applied to one side of a permanently opaque sheet of paper, the body of which is so colored throughout as to correspond to the color of the coating, so that the appearance of the sheet is substantially unaltered by the removal of transfer material.—A. P. C.

Carbon Paper. W. P. Pembroke assignor to Kee Lox Mfg. Co. U. S. pat. 1,546,747, July 21, 1925. A slight saturable carrier sheet is coated with a heated wax-containing color of penetrating qualities, cooled, reheated and again cooled to effect further penetration of the coating.—A. P. C.

Paper Made from Lanella Fiber. A. Lendle assignor to Kuttroff Pickhardt & Co., Inc. U. S. pat. 1,528,440, March 3, 1925. Use of the vegetable fiber known as "lanella fiber," either alone or with other fibers, gives a paper with a woolly velour texture, suitable for use as a highly finished wall paper, box covering paper, etc. The following examples are given: (1) the lanella fiber is put into the beater, colored and beaten. (2) Groundwood is colored with suitable dyestuffs, then mixed with lanella fiber previously prepared as in (1), (3). Groundwood is colored and mixed with undyed, beaten lanella fiber. (4) Lanella fiber is dyed, beaten, and then mixed with undyed groundwood.—A. P. C.

Process of Producing Paper. C. S. Bird. U. S. pat. 1,545,634, July 14, 1925. Strips of paper having thin edges are produced from a web having thin zones extending longitudinally thereof, by drying the web, slitting it along the thin zones, and then calendering the strips.—A. P. C.

Protective Edges of Paper Sheets. E. Lubcke. Eng. pat. 234,998. This is an improved apparatus for folding the edges of paper sheets and inserting a thread within the fold. The gold is coated with an adhesive and after the thread has been placed in position the fold is pressed. The pressing unrolls the thread so that it does not form a thickened edge.—A. P. C.

Reenforced Fibrous Material and Method of Making Same. E. C. Noonan, U. S. pat. 1,550,041 Aug. 18, 1925. A roll of netting is submerged in pulp and is unwound in the pulp. As it passes out of the pulp tank over a heated rotating roll pulp is flowed on the netting from the tank.—A. P. C.

Manufacture of Shingle Strips. S. M. Langston. U. S. pat. 1,532,538. April 7, 1925. The patent provides for various mechanical features improving the cutter and slitter covered by U. S. pat. 1,441,359 of Oct. 27, 1922, with a view to obtain clean accurate cuts and to allow of operating at high speeds.—A. P. C.

Fiber Board and Process and Apparatus for Making Same. J. K. Shaw assignor to C. F. Dahlberg. U. S. pat. 1,532,083 and 1,532,084, March 31, 1925. The essential feature of the board is that it is made of two or more kinds and layers of fibers, and the fibers of each layer are interlaced or entangled with the fibers of the adjacent layers. This is obtained by directing the flow of stock practically at right angles to the wire. The two outside layers are formed on two different wires, which are subsequently brought together, and the inner layer (or layers) is formed by leading a different kind of stock on to the same wires, but at a point further than that at which the outer layers are deposited. No. 1,532,083 covers the process and the apparatus, while No. 1,532,084 covers the product thus obtained.—A. P. C.

Heeling Board. A. L. Clapp assignor to Beckwith Mfg. Co. U. S. Pat. 1,552,036, Sept. 1, 1925. The board consists of cellulose fibers, leather fiber and disintegrated fibrous waste containing a thermoplastic compound, with the fibers felted together and the thermoplastic compound distributed and precipitated throughout the body of the board.—A. P. C.

Shoe Stiffener Board. A. L. Clapp assignor to Beckwith Mfg. Co. U. S. pat. 1,552,037, Sept. 1, 1925. A shoe stiffener adapted to be made limp and flexible on application of heat is made of felted cellulose fibers, cattle hair and leather fibers, with a thermoplastic compound distributed throughout the fibers.—A. P. C.

Fiber Board Boxes. Thomson & Norris Mfg. Co. Eng. pat. 235,673. These boxes have an interlining of corrugated material and an inside lining of plain material. The linings are applied so as to form an actual part of the box blank and enable them to be packed flat. If desired, the edges of the inside lining may extend to serve as flaps.—A. P. C.

Packing of Paper Rolls. Paper Mill 49, No. 38, 26 (Sept. 19, 1925). Brief description of the Ljunström paper roll packing machines and of their advantages.—A. P. C.

Process of Making Molded Fiber Articles. C. C. Loomis and H. E. Stump assignors to The Hevea Corporation. U. S. pat. 1,552,625. The fiber is treated with a natural latex, the latter is partially coagulated, and the articles are then molded.—A. P. C.

Manufacturing of Coating Stock. E. Arnould. L'Industrie Papet 4,266,268 (Sept. 1925). Practical hints on properties, furnishes and operating conditions.—A. P. C.

Coating Paper. F. K. Wickel. Eng. pat. 229,161, April 18, 1924. A fabric such as a sulphite paper web is coated on both sides with a phenolic condensation product or similar resinous substance which is applied in solution. Glycerol may be used as a softening agent. The product is transparent and adapted for use as a wrapping for candy, etc—A. P. C.

Sensitized Paper. J. Halden & Co. Eng. pat. 237,777. The following solution is coated on to the paper to impart a surface that will be sensitive to photographs for a long period before use: 232 parts of gelatine, tartaric acid and ferric sulphate, 480 parts ferric chloride. Each of these ingredients is mixed with 800 parts of water, except the gelatine, which is dissolved in 1600 parts. Before coating with this mixture, the paper is treated with baryta or barium sulphate. A final coating of gallic powder is given, either in the form of dust or in solution.—A. P. C.

Figured Paper. Fues. Eng. pat. 237,828. Variously shaped pieces of paper, celluloid, or silk are incorporated in the pulp to produce curious designs. To enhance this the pieces may be lacquered, colored, varnished or mercerized.—A. P. C.

Process for Molding Paper Board. T. E. Blasweiler. Papierfabr. 23, 499-501 (Aug. 2, 1925). A general discussion of processes for molding paper board.—J. L. P.

Manufacture of Fancy Paper. C. F. Thunert and K. E. Heinig. Ger. pat. 416,283. Papierfabr. 23, 551 (Aug. 23, 1925). Layers of transparent, colored paper are glued to an opaque paper base.—J. L. P.

Paper for a Metal Pencil. K. Rezsny. Ger. pat. 416,430. Papierfabr. 23, 551 (Aug. 23, 1925). Paper to be written on with a metal pencil is coated with zinc white or similar material. The adhesive employed is insoluble in water and consists of a rapid drying solvent, such as benzol, benzine, etc., containing a soluble gum, or alcohol containing a soluble resin.—J. L. P.

Filter Paper. Anon. Papierfabr. 23,639-641 (Oct. 4, 1925). A general discussion of filter paper and its manufacture.—J. L. P.

The Manufacture of Vulcanized Fiber Products. F. Huth. Papierfabr. 23, 621-623 (Sept. 27, 1925). A general discussion of the subject of vulcanized fiber and its uses.—J. L. P.

Process for Producing a Multiple Paper Sheet, One or More Layers of Which Are Parchmentized. F. Gunther. Ger. pat. 418,376. Papierfabr. 23, 646 (Oct. 4, 1925). Two or more sheets, sized or unsized, are combined by an adhesive. One or more sheets are parchmentized.—J. L. P.

Paperboard Manufacture. Anon. Wochbl. Papierfabr. 56,936-938. (Aug. 1); 968-971 (Aug. 8, 1925). The following German paper mill equipment is described: Schmidt stock purifier, the Kropp stock reclaimer, the Mann reclaimer, the Voith mechanical conveyor reclaimer, the Fullmer filter, and the Rollfof and Reform-Wanger cylindrical reclaimers.—J. L. P.

Process for Manufacturing Paper Varying in Strength and Color on the Paper Machine. M. Freitag. Ger. pat. 414,646.

TECHNICAL SECTION, PAGE 252

Wochbl. Papierfab. 56, 1258 (Oct. 10, 1925). A multiple sheet is made by producing several sheets, differently colored, on the paper machine.—J. L. P.

Process for the Manufacture of Paper Board from Fibers of All Kinds. Maschinenbau-Anstalt Humbolt. Ger. pat. 418,304. Wochbl. Papierfabr. 56, 1258 (Oct. 10 1925). Stock for the manufacture of paper board is prepared by disintegrating fibers in a beater or similar apparatus and the addition of rubber, balata, gutta percha, or drying, oxidized or sulphonated oils in a suitable form which precipitation of the substance is easily made.—J. L. P.

Blotting Paper and Cardboard. H. Postl. Papierfabr. 23, 578-580 (Sept. 6, 1925). A general discussion of the raw material for blotting paper manufacture and its preparation for the machine. Fine blotting paper is made from cotton cuttings; a good paper is made of cotton rags and aspen wood pulp; and a cheap paper has the following composition: 30% pulp from coniferous woods, 40% aspen wood pulp, and 30% clay. The testing of blotting paper is briefly described.—J. L. P.

Apparatus for the Continuous Impregnation of Roofing Paper in Sheet Form. E. Stallbaum. Ger. pat. 417,208. Papierfabr. 23, 583 (Sept. 6, 1925). The paper sheet passes over rolls which are immersed in a trough-like device.—J. L. P.

Bag Papers. W. Roth. Papierfabr. 23, 529-531 (Aug. 16, 1925). An experimental investigation of bag papers, especially for holding cement, etc. Bag paper made from soda pulp is preferred for filling with hot material, owing to its ability for regaining moisture and strength. The more viscous a pulp stock becomes, the less permeable is the resulting paper to air. This is particularly true of strongly beaten sulphite pulp. Paper having a tearing over 5000 m. and a stretch over 3% is unsuitable for bag manufacture. The air number is defined as the time required for 1 liter air under a definite pressure to pass through a certain area of paper and is a test used in evaluating papers made from soda and sulphite pulps, or their mixtures, for bag purposes.—J. L. P.

Manufacture of Waterproof Paper. E. Fues. Ger. pat. 415,557. Papierfabr. 23, 519 (Aug. 9, 1925). Paper is treated with acidic substances, with or without the addition of formaldehyde, and colloidal substances, such as casein, glue, etc. Antiseptics or colors may also be added. The sheet is dried at a temperature below 100° C.—J. L. P.

Manufacture of White or Striped Paper or Paperboard. Gebruder Haake. Ger. pat. 415,878. Papierfabr. 23, 519 (Aug. 9, 1925). Before or after the starch material is dissolved a small amount of sodium or potassium hydroxide, or a strong acid, is added.—J. L. P.

Determination of Alpha-Cellulose. C. G. Schwalbe. Papierfabr. 23, 477-480 (July 26, 1925). Report of a comparative investigation of the Jentgen, Waentig and Fiber Analysis Committee (German) methods for the determination of alpha-cellulose in wood pulps. A recommended sampling procedure is to cut the pulp strips into small pieces. Disintegration of the pulp in an iron grinding mill increases the ash content in iron by as much as 9.3 per cent. Rasped pulp contains fibrous particles which are more strongly attacked by the alkali than the whole fiber. Determinations by the Jentgen procedure gave 86.4 to 88.2 per cent alpha cellulose in a certain pulp; by the Waentig method 83.5 to 87.0 per cent was obtained, and by the Committee method the values were 84.9 to 87.0. The Waentig procedure was considered unsatisfactory for the purpose. Time, temperature and the method of stirring are the most important factors in the determination. (See also pp. 697-705.)—J. L. P.

Rope Drives in Paper Mills

SPECIAL INQUIRY NO. 47

Thirty years ago when electricity was comparatively new it was customary to transmit the power from the waterwheels direct to different parts of the plant by out door rope drives. Many of these are still in operation, although the ropes have been renewed several times.

At the same time and later, for heavy power loads carried by engines, steam turbines or motors, rope drives were used extensively on account of the small loss in transmission. Still more recently what is probably considered the best system for driving a paper machine, next to the sectional electric motor, is by means of ropes.

All of these applications of ropes have been in use sufficiently long to furnish valuable data as to the life of the ropes and their satisfaction in paper mills.

Under the TAPPI Service to Members Plan, a special inquiry is being made for information regarding rope drives in the paper industry used for driving paper machines and for general power transmission. To any plant having used them the information will be valuable. The replies with the data they contain are transcribed in blank, so that the identity of the mill is not disclosed. The compilation of the responses is issued as a Special Report which is distributed to all who contribute information on the inquiry.

In order to assist in ease of reporting and to indicate the information desired, the following outline is given:

A. *Driving Paper Machine*

1. Width of Paper Machine (couch) each _____
2. Horsepower transmitted each _____
3. Type of rope Drive _____
   English (multiple); American (single).
4. Amount of rope in each—feet _____
5. Life in years and months _____
6. Amount of transmission rope purchased yearly for repair or replacement—feet _____

   Exact data on each drive (date of installation, date of each replacement of rope, cost for rope at each renewal, etc., would be valuable.)

B. *General Power Transmission* (when outdoors please indicate)

1. Use of Rope Drive _____
2. Horsepower transmitted each _____
3. Amount of rope in each—feet _____
4. Life in years and months _____
5. Amount of rope used yearly for repair or replacement—feet _____

   Exact data on each installation (date of installation, date of each replacement of rope, cost for rope at each renewal) would be valuable.

Probably the information that would be of most common interest to paper mills reporting would be the life of the ropes driving the paper machine.

A discussion as to the advantages and disadvantages of rope drives in paper mills would be appreciated.

About July 1 the replies will be tabulated and a copy of the special report sent to all contributing information. Send responses to

W. G. MACNAUGHTON, Secretary, TAPPI,
18 East 41st St., New York.

Cloquet Wood Products Fellowships

In January 1925 there were established at the University of Minnesota two Fellowships known as the Cloquet Wood Products Fellowships. These were the result of conferences between the heads of the industries located in Cloquet, Minn., and members of the University staff.

D. R. Briggs, M. S., University of Missouri, and K. W. Franke, M. S., University of Virginia, were the fellows appointed at that time. They have carried on work regarding the methods of control analysis for cooking liquors in paper mills and also work upon the possibilities of H-ion concentration methods for control.

Both of these men were reappointed this year and are following up the work started the first year.

This work is not of a type for new methods of pulping or for patentable processes, but of a fundamental nature for the better understanding of the nature of wood, the pulping processes and the establishment of more thorough knowledge of wood technology in general.

Section of the

COST ASSOCIATION OF THE PAPER INDUSTRY

Affiliated with

THE AMERICAN PAPER AND PULP ASSOCIATION

Conducted by THOS. J. BURKE, C.A., Sec-Treas

Costs and Depreciation*

By Carl G. Jensen, Comptroller, A. M. Byers Co., Pittsburgh, Pa.

Probably because I am known to have rather decided opinions on the subject of charging depreciation on cost values higher than on replacement values, I was asked to discuss "Costs and Depreciation" before this gathering tonight.

I fear my talk may seem a little rambling to you, but it gives me an opportunity to present these ideas for criticism to a trained group of cost accountants and, I hope, to discover whether or not there really is anything worth while in some of the ideas which I have gradually acquired through considerable amount of study and practice of cost accounting and through being a good listener, at eight annual and regional conventions of the N.A.C.A. and at several chapter meetings.

What Is Cost?

At the very beginning, I want to raise the question as to what *cost* really is. Twenty odd years ago, when I first became interested in the subject of cost accounting, the definition seemed much more simple than it is today. Cost, as I understood it, represented the monetary value of materials and of services consumed in producing an article. Now we hear of so many kinds of costs that unless we are careful we may become confused. We hear about historical costs, reproductive costs, standard costs, predetermined costs, budgetary costs, prophetic costs, unit costs, process costs, departmental costs and many others. This multiplication of limiting phrases is due, of course, to the gradual recognition of the varying demands of different industries and of the different purposes for which costs are or may be used.

Standard Costs

Sometimes it seems that speakers or writers become so enthusiastic as to give the impression that they believe one kind of cost can serve all industries and all purposes. Take, for instance, standard costs. Its strongest advocates sometimes give one the impression that, in accordance with their belief and contention, if we once have standard costs we have all we need. I offer no criticism of standard costs. On the contrary, I believe in them, but I believe we need all of the other kinds of costs, also. It seems to me that every large company needs many of these different kinds of costs.

Management's Use of Costs

Just now a favorite subject for discussion is management's use of costs. This is important for the management and for the cost accountant as well. I believe if the cost accountant is to give the best possible service, he should be prepared to furnish information on costs according to any of the above plans, whichever may be the most useful.

When we talk about the use of costs by management, we should define what we mean by management so that we can get on a common footing. I have heard discussions on this subject going on for some time before it was developed that to one side of the discussion management meant the works' manager and to the other it meant the board of directors. To some of you "management" is represented by the works' manager, to others by the President, to others by the owner, and to still others by their direct superiors, whatever their titles.

Management Requires Various Kinds of Cost Data

"Management" to me means the supervisory and directing groups from the board of directors down. Sometimes even the foremen would be included. Each of these groups will require different kinds of cost data grouped in different ways and furnished at different intervals.

For a number of years past my experience has been with the iron and steel business. I am, therefore, more familiar with this industry and will draw by illustration from it.

We need historical costs to tell us what our profits are. If we charge materials into work in process at market instead of cost prices to get a check on the efficiency of our purchasing department, we try to secure two different kinds of results with one operation. It seems to me that we do not succeed because to find our net profit or loss we must build up two separate profit and loss accounts. Why is it not as correct to charge your materials at cost and then, if necessary, make the secondary calculation to show the efficiency of your purchasing department or your profit or loss in speculating in materials?

Standard Costs a Check on Operating Efficiency

It strikes me that the greatest value of standard costs is to the operating department. It is a measuring stick to apply against actual performance, whereby we can get a line on operating efficiency, as a check on conversion costs within departments or within the plant as a whole. By standard costs, labor efficiency, waste, lost time, and other elements, which are exceedingly important to the operating department, can be measured. But taken alone, standard costs cannot be used as a basis for selling, unless material and labor can always be secured without price changes.

Costs and Selling Prices

To set selling prices, we need what may perhaps be called a "prophetic standard cost." When we set prices, we have to develop a cost of this kind, based on the best available estimates of future labor and material costs, standard operation conversion performances, and normal overhead.

In our business of making pipe, we may, in this month, use ore contracted for a year ago. This ore may have been con-

* From N. A. C. A. Bulletin.

verted into pig iron six months ago. This pig iron may have been converted into muck bar perhaps four months ago, then the muck bar into skelp, and finally the skelp into pipe. If we ship pipe this month, you will readily understand, that the historical cost we apply, has been accumulated over a period of nearly a year. We believe the difference, between this cost and the selling price, gives us our correct profit for the month. In developing this cost, we incidentally develop departmental cost and unit costs by departments, in as much detail as necessary. These costs can and are used by the operating department, for comparison and with past performance.

But if we were setting new selling prices today, these historical costs would not, for several reasons, be used as a proper basis. Some labor rates may change every 60 days, ore prices change every year and many other cost elements may change. Therefore, before setting selling prices, we must develop an estimated future cost for each unit of output, calculated on the following basis:

1—Future ore, coke and other material cost prices estimated as far ahead as possible.
2—Estimated future labor costs.
3—Estimated production requirements.
4—Standard conversion cost in each department.
5—Normal overhead.

You may call this incomplete, intermittent or periodical budgeting if you prefer.

As historical costs are developed, information is given to the management, from the superintendent and his assistants to the president and directors. This information comes daily, weekly, monthly or when anything of special interest develops.

I have mentioned costs as being used for setting selling prices. When I mention this, I usually come up against the argument that competition, not costs, sets selling prices. The inference, therefore, usually is that it is useless to try to use costs for this purpose. I disagree with this viewpoint and contend that selling prices are primarily based on cost. The governing costs may be those of the leader in the industry or of the marginal producers, or they may be a sort of composite costs of all producers, but in the long run selling prices are based on costs arrived at in some manner even though such costs are only some sales manager's estimates.

Some of us may produce specialties with little or no competition and thus get more profits than producers in other lines where competition is keener. At all times, however, cotss, plus profits or less losses, make selling prices. Even where competition is keen, there has been very little profit in recent years in producing soft coal, beehive coke or pig iron. How many of you have had to figure out carefully at what price you could sell pig iron without losing as much as you would lose by shutting down your blast furnace? We have done this many times and when we do we help to set selling prices.

Definition of Cost

We now come back to the question, "What is Cost"? and is seems that cost still is what it has always been, i.e., the measure in terms of dollars of the outlay necessary to purchase or produce.

Some of the elements entering into cost can be applied directly to the commodity or unit under production, while others require a considerable amount of apportioning. When you come to the matter of apportioning, you need experience, information and good judgment. On items to be apportioned, judgments differ and there develop opportunities for interesting discussions.

Depreciation and Its Application to Costs

Probably the most difficult item to apportion is depreciation. You all know the definition of depreciation, but probably you have different ideas as to how you would apply depreciation to cost. I believe there are very few, if any, accountants who question that depreciation is an element of cost but they do differ on methods of charging it. In connection with depreciation, the principal problems, as I see them, are:

1—Rate of depreciation by (a) units of production, (b) departments, and (c) plants.
2—Distribution of depreciation (a) to departments, (b) to units of output.
3—At what percentage of plant or departmental operation should the full rate be applied, and what variations should be allowed when operations are below normal.
4—How can we make our book depreciation accounts agree with the depreciation allowed us by the Internal Revenue Department.

Some accountants and others have, during the last few years, been discussing whether they ought not to depreciate on the basis of replacement value instead of cost values. This question does not bother me at all. I have yet to hear what to me is a convincing argument in favor of charging depreciation into cost on replacement values. I will touch more on this point later.

The question as to whether or not depreciation is an element of cost seems to me to admit of no argument. In producing or manufacturing, we have direct labor which we can apply to the product without difficulty. We have indirect labor which we apportion, we have supervisory and miscellaneous labor which we allocate. We have direct material wholly consumed and easily calculated. We have direct material and supplies less easily applied, but can be apportioned with a reasonable degree of accuracy. When we consider tools and supplies, which can be used for a number of operations, we do not question their being cost elements.

In our business, puddlers tool iron may last for several days, instead of being consumed in direct conversion as is the case with the pig iron. Pipe balls may last for two to eight operations before being useless, and even then, if of the larger sizes, may be ground down to serve for the next smaller size. We do not question that pipe balls are an item in the cost of making pipe.

The roof or walls of a pipe furnace may last from six months to a year, and the lining of a blast furnace from a few weeks to three or four years. These items are direct costs of making pipe or pig iron, as much as the ore, limestone and coke used in the blast furnace or the skelp used in the pipe furnace.

If the outlay for the lining or roof of a furnace is cost, why not the outlay for the furnace itself, which may last eight to fourteen years for a pipe furnace and twenty to thirty years for a blast furnace, if obsolescence does not intervene to shorten the period.

In iron and steel mills the lining and repairing of furnaces are recognized as cost elements, but some producers stop at that point. The wear of the furnace as a whole is not considered a cost element and the same applies to buildings, machinery, and other units of longer life used for production.

I believe that, in any given operation, the exhaustion, wear and tear on the furnace, building, machinery, etc., is as much an element of cost as the expenditure for shorter lived items. The difference is a matter of degree only. This exhaustion or wear and tear is what we call depreciation. It is much more difficult to measure than the exhaustion wear and tear of the shorter lived elements, and perhaps largely for that reason has been omitted in so many cost calculations.

Depreciation is recognized as an element of cost not only by accountants but by the Internal Revenue Department, by the courts, by the United States and State Utility Commissions, etc., so why not apply it as an element in our costs? The principal difficulty is to determine the amount of depreciation, and how to charge it into costs.

Plant Values Must Be Segregated If Depreciation Is to Be Charged Correctly

First, you will need values. Usually your books will permit you to find plant costs, not only by plants, but by departments and by producing units. If your books do not supply the neces-

sary data you may have an appraisal made by competent appraisers. Then you need rates. There are numerous sources from which these can be secured. Rates published by utility commissions, trade associations, etc., are often available. Your own engineering and operating departments in co-operation may be able to give you fair or good estimates of the life of different units. The manufacturers may be able to supply data and competent appraisal companies will gladly supply you with rates.

The company with which I am associated, is an old company and some years ago when we decided to charge depreciation directly into production costs, our books did not give the necessary information as to details of plant cost. Fortunately, we did have a detailed appraisal at 1913 values which represented cost values to the company. This had been made by a competent appraisal company. For a comparatively reasonable expenditure we had this same appraisal company furnish us composite depreciation rates by departments, by individual units or by classes and charging of depreciation to operating or production units was simple. We believe the wear and tear on our blast furnace is a cost of producing pig iron, that the wear and tear on our puddle mills is a cost of producing muck bar and so on down the line. Depreciation charged by production departments or units is built into the cost through the various operations, so that when the final completed cost is arrived at there is no question of applying depreciation as general overhead or as a charge to profit and loss and there are no disputes with sales managers, who might attempt to have such items of cost eliminated when competition grows keen.

Departmental Costs Necessary for Comparative Purposes

Furthermore, we believe that we develop correct costs for each process, which are available for comparison with materials of a similar grade, if purchase is considered. Also the departments requiring the largest investment of capital directly reflect the cost of this greater investment in their production costs.

In compiling process costs the departmental charge for depreciation is automatically allocated to units of production through our regular procedure. Our pig iron and muck bar costs illustrate this method.

For skelp, pipe yielding and pipe finishing, we have to apply the depreciation charge to units of production in much the same manner as we do our departmental or operating burden. This may be on the basis of furnace hour, machine hour, man hour, etc.

Normal Capacity Figured at 75%

For distribution of the depreciation charge based on percentage of operation we have developed our practice on the following basis. First we determine the theoretical capacity of each operating department. Second, we assume that practical capacity is 75% of theoretical capacity. Third, we have decided that if operations in any department equal or exceed 75% of practical capacity, full depreciation will be charged. If operations are at a rate less than 75% of practical capacity some adjustments in the charge are made.

We have two rates of depreciation for each department or class of equipment. These rates were furnished by the appraisal company. The first is a net rate which is the estimated rate of depreciation over and above any possible replacement or maintenance and measures the depreciation which will take place even if the plant is idle. The second rate is a gross rate and includes the first, or net rate, plus the added percentage necessary to take care of replacements and wear and tear from use. These rates take into account the normal hours of operation of each department, i. e., a department operating 24 hours per day would take a higher rate than one operating 10 hours.

The full net rate is charged to each department even if idle. The full gross rate is only charged if operations are at 75% of practical capacity. If operations are at 37½% of practical capacity, we charge the net rate plus one-half of the difference between the gross and net rates.

We do not claim perfection for our plan but we do claim that it is workable and practical in our industry, and we will use it until we learn of a better method.

As to the best method of having books agree with the rates allowed by the Internal Revenue Department, I cannot give any suggestion.

Depreciation Rates Should Be Applied on Cost Basis

Now for the basis, on which to apply depreciation rates—cost or replacement—I will enumerate some of my reasons for believing in the cost basis:

1—Depreciation is recognized as a method of recovering or replacing funds used in capital investment by the time property representing the investment is worn out or valueless.

But it is replacement of funds about which we are concerned and not the creation of new funds for future investment, not replacement of physical units.

2—Advocates of the replacement basis always seem to argue from the standpoint of replacement values being higher than original cost values. Therefore, they desire a return through cost of a larger sum than they invested in order to replace physical units rather than dollars. Their arguments are heard most often in periods of rising costs.

But replacement costs could also easily be lower than investment cost, i.e., if a plant were constructed during the war or shortly after. I have not seen any plan worked out for a case of this kind.

3—What producer would ever desire a physical replacement of his plant? I claim none of them would. Most plants can be expected to last 20 years. Can you think of any plant owner who, if he lost a 20 year old plant, would want to replace it with one exactly like the old? He might want a new plant, but not a duplicate of the old. He would want changes in size, in design, and perhaps in purpose and location.

If he does not desire a replacement, I contend that he should ask no more than to have his investment returned. If he then, in building his new plant, wishes to increase or decrease his investment, he will have to make a new start with either increased or decreased investment and from then on depreciate on the basis of his new cost.

4—The replacement basis does not seem to me to be practical. The replacement or reproduction cost changes every time there is a change in labor rates, in freight rates, in taxes, or in the cost of any one of the hundred of items entering into the cost of a plant.

If you try to keep up to date with your replacement costs, you may find pourself in the position of the chameleon who was placed on a piece of scotch plaid and died trying to make good.

If you change your books on January 1 to agree with market rates, by July you may be farther away than if you had struck to cost.

5—Any plant passes through several periods of rising or falling prices. Therefore, when it is ready to scrap, the original cost may be as near to current replacement cost as any average of yearly revaluations.

6—Depreciation in a plant such as ours presents only about four to six per cent of the total cost of material produced. This is not a large enough proportion of the total, when taken alone, to put us entirely out of line in competition.

If newer plants represent higher investment than older plants, they should also be more modern and efficient and therefore and thereby more than offset the comparatively slight handicap of higher depreciation.

7—Who would do this constant revaluing for your plant? You would undoubtedly have to employ a force of trained engineers or to have the constant services of an appraisal company at a considerable cost.

8—If your plant were to be revalued each year (I am assuming that even the advocates of the reproductive method would not change oftener than this) your property would be very active accounts and afford little opportunity for comparisons of any value from year to year.

9—If you charge depreciation on replacement values you are singling out one comparatively small element of cost to be handled in a different way from your other elements. You charge less insurance, salaries, labor, etc., into cost at the price, in dollars, you paid for them not at a price you might have to pay at some distant day in the future.

10—Depreciation has well been called a "guesstimate," but on a cost basis we at least have the one known and fixed factor of original cost. The rate only has to be estimated. The advocates of the replacement basis would have us work out our problem with two unknown and no known factors.

I do not by any means object to provision being made for replacement of plants on estimated higher future cost, if the management of the company believes costs will be higher when replacement becomes necessary.

The management has a choice of different ways of accomplishing this purpose.

1—It can conserve profits for this purpose through reserves or through the surplus account.

2—It can endeavor to secure a higher rate of profit and conserve such profit in a separate reserve.

3—But this extra profit should be called by its proper name and not called "cost".

I do not believe we should endeavor to have our depreciation and cost accounts take over the function of management. These records should, as far as possible, deal with facts and leave the larger questions of policy which require executive judgment to the executives who are charged with this responsibility.

Cost accounts and statistics can record facts, conditions and even probabilities, but they cannot take the place of good business judgment.

Results of Tests on Ledger and Bond Papers

[FROM OUR REGULAR CORRESPONDENT]

WASHINGTON, D. C., May 10, 1926.—E. O. Reed, Chief of the Testing Section of the Government Printing Office, has just made his second report, tabulating the result of tests made on commercial ledger and bond papers. In connection with this second test Mr. Reed says:

Study Began in 1924

"During the year 1924 the Testing Section of the Government Printing Office in co-operation with the United Typothetae of America, began a study of bond and ledger papers to determine whether definite grades could be established for the making and use of these papers. For this investigational work samples of regular mill brand papers, including 103 bond and 49 ledger papers, were submitted by 33 manufacturers.

"As a result of this work tentative specifications and grades for bond and ledger papers were prepared and published, together with a classified tabulation of tests on commercial samples submitted by the manufacturers. The preliminary report interested the manufacturers and consumers of paper to such an extent that it was decided to continue the investigation, and the makers of bond and ledger papers were requested in the fall of 1925 to furnish new samples from their present stocks of regular mill brand papers.

Tentative Specifications Verified

The second set of samples were tested and compared with the first samples to verify the tentative specifications and grades as proposed in 1924. The results of this extended and comprehensive investigation have sustained the original suggestion and have shown a marked inclination on the part of several manufacturers to produce bond and ledger papers more closely in accord with the suggested specifications and grades. The Government Printing Office, with the approval of the Joint Committee on Printing, has already adopted the proposed grades for bond and ledger papers, and the keen competition of manufacturers for Government contracts indicates a willingness on their part to conform to definite specifications.

"In publishing the results of the investigation in 1924 the trade brand and name of manufacturer were omitted, but each manufacturer was assigned a letter or letters printed in parentheses after the serial numbers of all papers submitted by him. The same method has been adopted in pubdishing the results on the samples submitted for the present investigation, but all manufacturers have been assigned new cipher letters. Therefore, the samples in the first report with the letter "a" are not made by the same manufacturer as those in the second report marked "a". Samples for this second investigation on bond and ledger papers were furnished by 41 mills submitting 121 bonds and 58 ledger paper samples.

"Inasmuch as the results of the first investigation on bond and ledger papers indicated that the folding endurance test was most indicative of the serviceability, durability, and quality of these papers, the folding endurance test and the bursting strength test were the only physical tests made in the second investigation. The results reported in this tabulation are the average of a sufficient number of tests to furnish fair and accurate information as to the quality of the various samples submitted.

"Quantitative determination for glue has also been made of samples containing glue sizing as a quantitative determination of total rosin for all papers complying with the tentative specifications for grades 1 and 2.

"The fiber content of all papers was determined by the court method and all chemical wood pulp is reported as to nature of wood fiber, coniferous or broadleaf, and not as to the character of cook, whether soda or sulphite.

"All physical tests were conducted in the constant temperature and relatives humidity room of the Testing Section of the Government Printing Office under the conditions of 70-75 degrees F. temperature and 50 per cent relative humidity. This condition is automatically maintained day and night throughout the year and all samples were exposed to these conditions for at least 12 hours previous to testing.

"The bursting strength result reported is the average of not less than 20 tests on each sample, 10 tests being made on each of two testers. The folding endurance result reported is the average of 20 tests in each direction, 10 tests being made on each of two testers.

"All testing instruments used were of the standard approved type commercially used for paper testing and were carefully calibrated for accuracy.

"The results of the second tests are available and will be classified and printed later in accordance with proposed tentative specifications for bond and ledger papers. Any additional samples submitted by manufacturers will be added to the next tabulation. Suggestions and comments from those interested in the work are cordially solicited."

Honor Paid to Veteran Official

Henry L. Thompson, president of Copp, Clark Company, Limited, Toronto, has just completed sixty years of service with that company. In 1894 he succeeded the late W. W. Copp as president. Mr. Thompson was tendered a complimentary dinner lately at the National Club, which was attended by a large number of paper wholesalers. During the evening he was presented with a beautifully illuminated address from his business associates.

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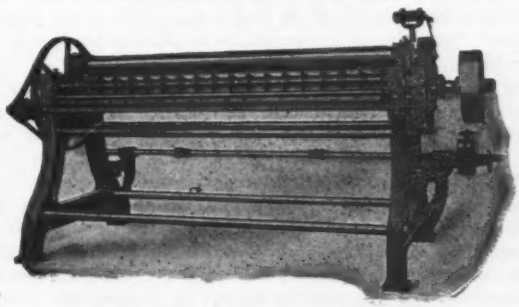

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FOR MAKING TUBES FOR TOILET PAPER ROLLS CAPABLE OF PRODUCING 3,600 WIRE STITCHED TUBES PER HOUR

Also machines for making Sanitary Crepe Paper, Towels, Slitting and Rewinding Machines, Drop Roll Slitters, Photo Mount Beveling Machines, Rotary Card Cutting and Collating Machines, Etc.

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DIETZ MACHINE WORKS

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Corner Waterloo St., Below Diamond St., Bet. Front and 2nd Sts.

Obituary

William E. Reddington

[FROM OUR REGULAR CORRESPONDENT]

HOLYOKE Mass., May 17.— William E. Reddington, 73, widely known throughout the country for years as a successful paper mill superintendent died Friday at the home of his daughter Miss Florence Reddington of 9 Allyn street after a long period of failing health. Only a few days ago when a fire threatened the destruction of his block he had to be carried out of his room. He was badly frightened by this event and it is not impossible that this hastened his end.

He began his work as a papermaker at the Holyoke Paper Company now a division of the American Writing Paper Company coming to Holyoke from White Water, Wisc. His ability as a papermaker brought to him quick recognition and he was advanced to the position of boss machine tender and then as superintendent of the plant.

He was placed in charge successively of mills of the Ticonderoga Pulp and Paper Company at Ticonderoga, N. Y.; the Whiting Paper Company mill at North Wilbraham and the George R Dickinson Division of the American Writing Paper Company. retiring from that division some years ago on account of failing health. He was a member of Mt. Tom Lodge Masons and of the Springfield Shriners. The funeral was held yesterday afternoon at the home and was private.

P. J. Dowd Reports on Papers in New England

[FROM OUR REGULAR CORRESPONDENT]

BOSTON, Mass., May 17.—The first annual meeting of the New England Shippers Advisory Board was held Wednesday at the Copley Plaza Hotel when reports of the executive committee and other reports were made. The speakers were Homer Loring, chairman of the Board of Directors of the Boston & Maine Railroad, Lieut. Col. W. C. Jones, of Boston, and Freight Claim Agent MacDonald of the Boston & Maine Railroad.

Patrick J. Dowd, of Holyoke, as Vice Chairman of the Paper Committee presented the following report on all paper and paper articles produced in New England:

"News print, printing paper, pulp and paper articles New England news prints industry report present operations at full capacity with every indication of a continuance at capacity production for the coming quarter.

"The printing paper, book paper and board, writing paper industries show an increase for the first quarter of 1926 of 4 per cent over the same period last year. The outlook for the next three months is better than for the same period last year, though no definite figures are ventured.

"Paper articles, envelopes, papeteries, blank books, pads and tablets, paper napkins and tissue paper for the first quarter of 1926 report an increase of 3 per cent in number of cars loaded over the corresponding period of 1925. For the next three months, it is estimated that the same percentage of increase will prevail. A general survey of all the factors in the paper industry indicate a fairly level trend of business this year as compared with last. As an illustration the record of cars received and forwarded at Holyoke,, Massachusetts, which is pre-eminently a Paper City shows 8292 carloads received during the first quarter of 1926 or 1.1 per cent greater than the same period last year. Similarly, carloads forwarded were 4801 or 1.8 per cent over the same period of 1925.

"Wood pulp—imports: A conservative estimate will indicate about 160,000 gross tons will be discharged at Boston from April 17 to the end of 1926. The imports for the next three months at the Port of Boston are estimated as follows:

	Tons
April	4,000
May	10,000
June	17,000

"The Port of Portland, it is estimated, should handle about 35,000 gross tons of European wood pulp during the remaining nine months of 1926 and the arrivals are estimated about, as follows, during the coming quarter.

	Tons
April	1,000
May	3,000
June	5,000

"Transportation: With regard to transportation conditions during the past quarter, the record shows that in spite of very heavy snowstorms and bad weather, a few minor interruptions during the month of February which must be charged to New England's spicy climate. The car supply has been adequate, good time reported on shipments, and service in general has been satisfactory."

Import Committee Extends Activities

In pursuance of its original program to have men on both sides of the water to guard against the unfair importation into this country of foreign paper, the Import Committee of the American Paper Industry has engaged George R. Coxe to serve as its representative abroad. The original program of the committee contemplated the investigation of all questionable foreign importations, both through customs experts in this country, and through a representative abroad who might check such unfair competition at the source.

Hitherto, the committee has devoted its attention to the proper classification and valuation of foreign papers after they have reached this country. The activities of the committee have disclosed so many forms of unfair foreign competition that the extension of the committee's activities proved to be absolutely necessary if the field is to be adequately covered. There are now nearly 1,200 cases pending before the customs courts as a result of the committee's work.

Mr. Coxe, who is to represent the committee abroad sails May 20 to take up his new work. He is thoroughly conversant with the problems before the committee, as well as with customs procedure, having spent several years in Europe as a member of the Customs Service. Warren B. Bullock, manager of the Import Committee will sail with him to secure a first hand knowledge of European conditions, and to assist in organizing this new form of the committee's work.

Demand in Boston Shows Improvement

[FROM OUR REGULAR CORRESPONDENT]

BOSTON, Mass., May 17, 1926.—General business in the Boston paper district is taking on a brighter aspect and for the last two weeks an improvement in most all divisions has been reported. Two reasons are given. First, the improvement in general business is quite marked. This includes textiles and other industrials, also the up-town stores, all of which are at present in the market for paper goods. Second, because there is an apparent tendency, more pronounced than for some time, on the part of the public, to buy. All of this reflects into the paper business. A steady run of real spring weather will help things even more.

The fine grade houses are all busy. The demand for special orders by printers keeps the printing paper division extremely busy. Social affairs, weddings, graduations, cause a steady demand for invitation and announcements stock. Prices remain about the same.

In fact all grades of paper have been sharing in a wholesome business despite the tendency to cling to the hand-to-mouth buying. The coarse paper division men report an increased call from the manufacturing centers for their stock. Business in these districts is picking up and stock is low, thus causing some good orders to be placed. Roofings and all other paper stock used in the building trades is in big demand now.

Salesmen coming in from the road report many mills running full time. Paper stock is being bought a little more frequently.

The imported and domestic rag market in this section is quiet. With slightly warmer weather the domestic rag collections are getting back to a near normal state once more.

Japanese Papers

JAPAN Hand and Machine made Papers are carried in stock at our warehouse 12-16 Vestry Street. Don't pass up an order for JAPANESE PAPER no matter for what purpose; come to us for samples and prices.

Whitfield Paper Works, Inc.
12-16 Vestry Street
New York, N. Y.
Established 1869

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Mechanical Filtration Plants
Gravity and Pressure Types
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Wright Hoist Unit

THERE are 21 reasons why you should not be without this superhoist unit, (I-Beam, Trolley & High Speed Hoist) with its 21 points of superiority.

Let us tell you about each one!

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"Improved High Speed Hoist Unit"

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Daily Capacity
425 TONS

Newsprint, Catalog
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Butchers Manila
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General Sales Office
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Pittsburgh, Pa.

F. L. Smithe Machine Co., Inc.

Manufacturers of

Envelope Machinery

for making any style envelope, regular or special. Printed, stamped, embossed and tissue lined envelopes. Also die presses, tension machines, metal clasp machines, and all other machinery used in making envelopes.

633 West 44th Street New York, N. Y.

Imports of Paper and Paper Stock

NEW YORK, BOSTON, PHILADELPHIA AND OTHER PORTS

NEW YORK IMPORTS

WEEK ENDING MAY 15, 1926

SUMMARY

Cigarette paper .....1,235 cs.
Wall paper .....2 bls.
Paper Hangings .....19 bls., 3 cs.
News print .....1,538 rolls, 119 bls.
Printing paper .....166 rolls, 117 cs.
Wrapping paper .....22 bls., 3 cs.
Packing paper .....5 cs.
Kraft paper .....101 rolls
Fancy paper .....5 cs.
Gallic paper .....3 cs.
Writing paper .....2 cs.
Note paper .....2 cs.
Envelopes .....4 cs.
Drawing paper .....88 cs.
Filter paper .....93 cs.
Stencil paper .....15 cs.
Tissue paper .....10 cs.
Baryta coated paper .....250 cs.
Surface coated paper .....2 cs.
Metal coated paper .....9 cs.
Decalcomania paper .....28 cs.
Pergamyn paper .....60 cs.
Cover paper .....5 cs.
Trunk paper .....4 cs.
Paper tubes .....2 cs.
Serpentine paper .....25 cs.
Miscellaneous paper ...796 rolls, 302 bls., 207 cs.

CIGARETTE PAPER

Standard Products Corp., McKeesport, Havre, 60 cs.
American Tobacco Co., Collamer, Bordeaux, 1,150 cs.
British American Tobacco Co., Adriatic, Liverpool, 5 cs.
Max Spiegel & Son, Inc., Colombo, Genoa, 20 cs.

WALL PAPER

A. C. Dodman, Jr., Inc., Majestic, Southampton, 2 bls.

PAPER HANGINGS

W. H. S. Lloyd & Co., American Shipper, London, 8 bls.
W. H. S. Lloyd & Co., American Shipper, London, 3 cs.
A. C. Dodman, Jr., Inc., Samaria, Liverpool, 11 bls.

NEWS PRINT

Parsons & Whittemore, Inc., West Haven, Hango, 1,289 rolls.
Maurice O'Meara Co., West Haven, Hango, 29 bls.
National City Bank, West Haven, Hango, 249 rolls, 90 bls.

PRINTING PAPER

B. F. Drakenfeld & Co., Adriatic, Liverpool, 19 cs.
Keuffel & Esser, Thuringia, Hamburg, 9 cs., 99 rolls.
J. Henschel & Co., Thuringia, Hamburg, 10 cs.
Titan Shipping Co., France, Havre, 23 cs.
Maurice O'Meara Co., West Haven, Hango, 56 cs.
Keuffel & Esser, Reliance, Hamburg, 67 rolls.

WRAPPING PAPER

Gallagher & Ascher, London Commerce, London, 3 cs.
Wilkinson Bros. & Co., Inc., Thuringia, Hamburg, 15 bls.
Irving Bank Columbia Trust Co., Thuringia, Hamburg, 7 bls.

PACKING PAPER

Steffens, Jones & Co., Tomalva, Rotterdam, 5 cs.

KRAFT PAPER

Arkell Safety Bag Co., Stockholm, Gottenburg, 101 rolls.

FANCY PAPER

Whiting & Patterson Co., Inc., Majestic, Southampton, 3 cs.
American Express Co., Port Albany, London, 2 cs.

GALLIC PAPER

Keuffel & Esser, Port Albany, London, 3 cs.

WRITING PAPER

Abraham & Strauss, McKeesport, Havre, 1 cs.
W. J. Byrnes & Co., McKeesport, Havre, 1 cs.

NOTE PAPER

H. Reeve Angel & Co., Inc., American Shipper, London, 2 cs.

ENVELOPES

H. Reeve Angel & Co., Inc., American Shipper, London, 4 cs.

DRAWING PAPER

Keuffel & Esser, Thuringia, Hamburg, 46 cs.
Keuffel & Esser, Port Albany, London, 3 cs.
Keuffel & Esser, Reliance, Hamburg, 39 cs.

FILTER PAPER

C. Schleicher Schull Co., Thuringia, Hamburg, 10 cs.
E. Fougera & Co., Majestic, Bordeaux, 83 cs.

STENCIL PAPER

Andrews & Co., Inc., Thuringia, Hamburg, 15 cs.

TISSUE PAPER

J. B. Mast & Co., Colombo, Genoa, 3 cs.
Columbia Ribbon & Carbon Mfg. Co., West Havre, Hango, 7 cs.

BARYTA COATED PAPER

Globe Shipping Co., Sierra Ventana, Bremen, 171 cs.
Globe Shipping Co., Columbus, Bremen, 79 cs.

SURFACE COATED PAPER

H. D. Catty & Co., Thuringia, Hamburg, 1 cs.
Whiting & Patterson Co., Reliance, Hamburg, 1 cs.

METAL COATED PAPER

Hensel Bruckman & Lorbacher, Thuringia, Hamburg, 9 cs.

DECALCOMANIA PAPER

L. A. Consmiller, Columbus, Bremen, 23 cs.
C. W. Sellers, Reliance, Hamburg, 5 cs.

PERGAMYN PAPER

F. C. Strype, Reliance, Hamburg, 60 cs.

COVER PAPER

International Forwarding Co., Reliance, Hamburg, 5 cs.

TRUNK PAPER

P. H. Petry & Co., Thuringia, Hamburg, 4 cs.

PAPER TUBES

H. de Maguinn, France, Havre, 2 cs.

SERPENTINE PAPER

Guaranty Trust Co., Thames Maru, Hamburg, 25 cs.

MISCELLANEOUS PAPER

Perry Ryer & Co., Tuscania, Glasgow, 80 cs.
Arkell Safety Bag Co., Stockholm, Gothenburg, 202 rolls, 33 bls.
C. G. Winans, Stockholm, Gothenburg, 22 bls., 593 rolls.
The Borregaard Co., Inc., Stockholm, Gothenburg, 1 roll, 247 bls.
E. H. Sergeant & Co., Stockholm, Gothenburg, 3 cs.
General Electric Co., Colombo, Genoa, 40 cs.
Japan Paper Co., France, Havre, 9 cs.
Judson Freight Fdg. Co., France, Havre, 16 cs.
A. L. Diament & Co., France, Havre, 6 cs.
Guibout freres, France, Havre, 13 cs.
British American Tobacco Co., France, Havre, 30 cs.
Perkins Goodwin & Co., Reliance, Hamburg, 10 cs.

RAGS, BAGGINGS, ETC.

V. Galaup, McKeesport, Havre, 142 bls. rags.
A. W. Fenton, Inc., McKeesport, Havre, 69 bls. rags.
E. J. Keller Co., Inc., Collamer, Bordeaux, 39 bls. rags.
Baltimore Trust Co., Collamer, Bordeaux, 4 bls. rags.
Fidelity Int'l Trust Co., Adriatic, Liverpool, 33 bls. bagging.
Goschens & Cunliffe, Adriatic, Liverpool, 86 bls. bagging.
Amsinck, Sonne & Co., Inc., London Commerce, London, 21 bls. rags.
F. Stern, S. Ventana, Bremen, 153 bls. rags.
American Exchange Natl. Bank, S. Ventana, Bremen, 86 bls. rags.
National Bank of Commerce, S. Ventana, Bremen, 141 bls. rags.
Anglo South American Trust Co., S. Ventana, Bremen, 48 bls. rags.
L. H. Abenheimer, S. Ventana, Bremen, 138 bls. rags.
Chase National Bank, S. Ventana, Bremen, 43 bls. rags.
Irving Bank Columbia Trust Co., S. Ventana, Bremen, 64 bls. jutewaste.
Irving Bank Columbia Trust Co., S. Ventana, Bremen, 71 bls. bagging.
State Bank, S. Ventana, 205 bls. rags.
Goldman Sachs & Co., S. Ventana, Bremen, 52 bls. rags.
Chemical National Bank, S. Ventana, Bremen, 143 bls. rags.
A. W. Fenton, Inc., S. Ventana, Bremen, 31 bls. rags.
Central National Bank, Tuscania, Glasgow, 38 bls. bagging.
Castle & Overton, Inc., Clontarf, Greece, 204 bls. rags.
Manufacturers Trust Co., United States, Copenhagen, 345 bls. bagging.
Amsinck Sonne & Co., Inc., Amer. Shipper, London, 19 bls. rags.
Darmstadt Scott & Courtney, T. Fagelund, B. Aires, 5 bls. rags.
B. D. Kaplan, Samaria, Liverpool, 3 bls. rags.
L. H. Abenheimer, Samaria, Liverpool, 72 bls. paperstock.
E. J. Keller Co., Inc., Thuringia, Hamburg, 16 bls. newcuttings.
State Bank, Thuringia, Hamburg, 191 bls. rags.
Darmstadt Scott & Courtney, Thuringia, Hamburg, 23 bls. rags.
A. W. Fenton, Inc., Thuringia, Hamburg, 96 bls. rags.
W. Steck & Co., Thuringia, Hamburg, 29 bls. rags.
Salomon Bros. & Co., Thuringia, Hamburg, 140 bls. bagging.
Anglo South American Trust Co., Port Albany, London 15 bls. paperstock.
E. J. Keller Co., Inc., Tomalva, Rotterdam, 95 bls. rags.
Soen Bros. & Co., Tomalva, Rotterdam, 55 bls. rags.
A. W. Fenton, Inc., Tomalva, Rotterdam, 162 bls. rags.
Maurice O'Meara Co., Fenchurch, Barcelona, 170 bls. bagging.
Royal Manfg. Co., Fenchurch, Barcelona, 107 bls. rags.
State Bank, Renchurch, Barcelona, 6 bls. rags.
L. H. Abenheimer, Fenchurch, Barcelona, 65 bls. bagging.
E. J. Keller Co., Inc., Reliance, Hamburg, 110 bls. rags.
Robert Blank, Reliance, Hamburg, 155 bls. rags.

OLD ROPE

Brown Bros. & Co., New York City, Bristol, 102 coils.
Brown Bros. & Co., Chicago City, Bristol, 14 coils.
Brown Bros. & Co., Stockholm, Gothenburg, 122 coils.
Brown Bros. & Co., Thames Maru, Hamburg, 37 coils.
Irving Bank Columbia Trust Co., S. Ventana, Bremen, 71 coils.
W. Steck & Co., Thuringia, Hamburg, 29 coils.

WOOD PULP

Bulkley Dunton & Co., Sweden Maru, Hamburg, 130 bls. woodpulp, 25 tons.
Bulkley Dunton & Co., Tomalva, Rotterdam, 645 bls. woodpulp, 133 tons.
Nilsen Lyon & Co., S. Ventana, Bremen, 301 bls. woodpulp.
Johanson Wales & Sparre, Inc., Stockholm, Gothenburg, 125 bls. sulphate pulp.
E. M. Sergeant & Co., Stockholm, Gothenburg, 299 bls. dry soda pulp.
Price & Pierce, Ltd., Stockholm, Gothenburg, 720 rolls wet pulp.
H. Hollesen, Inc., Columbus, Bremen, 1310 bls. sulphite pulp.
National City Bank, Thames Maru, Hamburg, 425 bls. woodpulp, 85 tons.
Italian Bank, Thames Maru, Hamburg, 700 bls. woodpulp, 102 tons.
H. Hollesen, Inc., Sweden Maru, Hamburg, 265 bls. sulphite pulp, 53 tons.

WOOD PULP BOARDS

M. Meyerson, Stockholm, Gothenburg, 166 bls.

WOOD PULP WADDING

Eisenkramer & Co., Thuringia, Hamburg, 40 bls.

WOOD FLOUR

E. M. Sergeant & Co., Stockholm, Gothenburg, 204 bags.

CASEIN

Atterbury Bros., Inc., Collamer, Bordeaux, 100 bags.
American Exchange Natl. Bank, T. Fagelund, B. Aires, 417 bags, 25,030 kilos.
American Exchange Natl. Bank, T. Fagelund, Santa Fe, 834 bags, 50,040 kilos.
T. M. Duche & Sons, T. Fagelund, B. Aires, 4,170 bags, 250,020 kilos.
Kalbfleisch Corp, So. Cross, B. Aires, 934 bags.
Fuerst Bros., C. Challenger, Auckland, 68 bags.

ALBANY IMPORTS

WEEK ENDING MAY 15, 1926

A. P. W. Pulp & Power Co., Urter, Sheet Harbor, N. S., 13,339 bls. woodpulp.

BOSTON IMPORTS

WEEK ENDING MAY 15, 1926

Kalbfleisch Corp., T. Fagelund, Santa Fe, 2,667 bags casein, 352,780 lbs.
American Exchange Natl. Bank, T. Fagelund, Santa Fe, 417 bags casein, 25,020 kilos.
1st Natl. Bank of Boston, T. Fagelund, B. Aires, 834 bags casein, 50,040 kilos.
T. M. Duche & Sons, T. Fagelund, B. Aires, 417 bags casein, 25,020 kilos.
Brown Bros. & Co., Darian, Manchester, 247 coils old rope.
Brown Bros. & Co., Darian, Manchester, 10 bls. rags.
G. F. Malcolm, Darian, Manchester, 20 cs. tissue paper.
Leigh Textile Co., Darian, Manchester, 43 bls. cottonwaste.
Chemical Natl. Bank, Thames Maru, Hamburg, 22 bls. rags.
J. H. Scott Paper Co., Thames Maru, Hamburg, 96 rolls printing paper.
Atterbury Bros., Inc., Thames Maru, Hamburg, 130 bls. strawpulp, 27 tons.
Paper House of Penna., Thames Maru, Hamburg, 26 cs. printing paper.
G. M. Graves Co., Thames Maru, Hamburg, 122 bls. bagging.
Leigh Textile Co., Thames Maru, Hamburg, 34 bls. cottonwaste.
National City Bank, Thames Maru, Hamburg, 525 bls. woodpulp, 105 tons.
Robert Blank, Nitonian, Rotterdam, 249 bls. rags.
Castle Overton, Inc., West Eldara, Rotterdam, 1,243 bls. woodpulp.
Castle Overton, Inc., Nitonian, Antwerp, 2,168 bls. woodpulp.
Bulkley Dunton & Co., Blydendyk, ——, 650 bls. woodpulp.
Buck Kiaer & Co., Inc., Delaware, Oslo, 640 bls. kraft pulp.
Buck Kiaer & Co., Inc., Delaware, Oslo, 4,000 bls. sulphite pul-

BALTIMORE IMPORTS

WEEK ENDING MAY 15, 1926

Robert Blank, McKeesport, Dunkirk, 124 bls. rags.
H. Hollesen, Inc., Goettingen, Bremen, 135 bls. sulphite pulp, 27 tons.
Bulkley Dunton & Co., Sacandaga, ——, 976 bls. woodpulp.
Bulkley Dunton & Co., Westerner, ——, 1,353 bls. woodpulp.

PHILADELPHIA IMPORTS

WEEK ENDING MAY 15, 1926

A. W. Fenton, Inc., Collamer, Bordeaux, 74 bls. rags.
E. J. Keller Co., Inc., Collamer, Bordeaux, 223 bls. rags.
A. Murphy & Co., London Commerce, London, 3 cs. writing paper.
Paper Service Co., London Commerce, London, 1 cs. fancy paper.
Old Colony Trust Co., London Commerce, London, 138 coils old rope.
W. Schall & Co., London Commerce, London, 57 bls. rags.
Ohio Boxboard Co., London Commerce, London, 251 bls. wastepaper.
Philadelphia Paper Mfg. Co., N. Y. City, Bristol, 159 bls. wastepaper.
Castle & Overton, Inc., Tomalva, Rotterdam, 282 bls. woodpulp, 45 tons.
S. Birkenstein & Sons, Tomalva, Rotterdam, 329 bls. rags.
E. Butterworth & Co., Inc., Tomalva, Rotterdam, 17 bls. rags.
S. E. Ingler & Co., Tomalva, Rotterdam, 434 bls. rags.
M. Friedman, Tomalva, Rotterdam, 10 bls. rags.
Pottasch Bros. Co., Tomalva, Rotterdam, 80 bls. bagging.
D. I. Murphy, Tomalva, Rotterdam, 68 bls. bagging.
Robert Blank, Tomalva, Rotterdam, 66 bls. rags.
R. Wolf, Tomalva, Rotterdam, 124 bls. rags.
Lagerloef Trading Co., West Haven, Hango, 538 bls. woodpulp boards, 79 tons.
Lagerloef Trading Co., West Haven, Hango, 405 rolls woodpulp boards, 36 tons.
Fidelity Intl. Trust Co., West Haven, Hango 180 bls. rags.
Paper House of Penna., West Haven, Hango, 189 cs. printing paper.
National Bank of Commerce, Thames Maru, Hamburg, 53 bls. rags.
Brown Bros. & Co., Thames Maru, Hamburg, 140 bls. rags.
Castle & Overton, Inc., Thames Maru, Hamburg, 94 bls. rags.
S. Birkenstein & Sons, Thames Maru, Hamburg, 56 bls. rags.
Castle & Overton, Inc., Nitonian, Antwerp, 3,640 bls. woodpulp.
Castle & Overton, Inc., Nitonian, Antwerp, 296 bls. rags.
Castle & Overton, Inc., Blydendyk, Rotterdam, 334 Bls. woodpulp.
Castle & Overton, Inc., Hellen, Marseilles, 118 bls. rags.
Castle & Overton, Inc., Westpool, Hamburg, 245 bls. rags.
Castle & Overton, Inc., Utah, France, 322 bls. rags.
H. Hollesen, Inc., Goettingen, Bremen, 270 bls. sulphite pulp, 54 tons.
Bulkley Dunton & Co., Goettingen, Bremen, 1,065 bls. woodpulp.

NEW ORLEANS IMPORTS

WEEK ENDING MAY 15, 1926

Castle & Overton, Inc., Missouri, Antwerp, 123 bls. rags.
Castle & Overton, Inc., Ingram, Germany, 38 bls. bagging.
Castle & Overton, Inc., Crabford, France, 217 bls. rags.

Franklin Board & Paper Co. Improvements

FRANKLIN, Ohio, May 17, 1926.—The Franklin Board and Paper Company has, within the last five years, practically rebuilt its paper board mill. The first change was the replacing of a simple Lane and Bodley engine with a Heavy Duty Tandem Compound Hamilton Corliss Engine, directly connected to the beater room line shaft. This change was made early in the year 1921. Then early in the year 1924, the Atlas Corliss engine, driving the constant speed line shaft of the machine, was replaced with a modern Hamilton Corliss engine.

In the same year, 1924, an addition forty feet wide by one hundred and fifty feet long was built to the finishing room.

Last year, a Shartle continuous beating system, complete with iron settling trough, 4 x 115 feet, wet machine and stuff pump, were installed. This continuous beater has been equipped with a Murphy Extractor, for removing the heavier material, such as iron, tin cans, etc., from the beater without the necessity of shutting down the beater. This arrangement is working in a highly satisfactory manner and is the patent of the superintendent, Lloyd T. Murphy.

Two Sturtevant Aerofin heaters have been installed in the beater room to take care of the heating and moisture. The six other beaters have been entirely rebuilt; two of them being equipped with Griley-Unkle patent beater hoods. Two new three-plunger Shartle stuff pumps have also been added.

The paper machine has been rebuilt by the addition of another vat and cylinder, making seven cylinders on the machine. The driers have been erected in the Black-Clawson patent vertical drier frames and fifty-two driers added, giving a total of one hundred and thirty-eight driers. The drier section is equipped with a patent Sheehan rope carrier. A new heavy duty Black-Clawson cutter has also been installed. A Cameron slitter and rewinder, the full width of the machine, is being installed.

The machine room has also been remodeled to accommodate the stack driers. The east side of the room has been equipped with Bayley steel sash and wide glass, which makes a splendidly lighted room. The roof has been raised three feet and is of steel girder construction with Gypsum Pyrobar roof deck, covered with Johns-Manville Company asbestos and asphalt roofing.

A Monitor 5 x 96 feet, designed by the president, George Little, has been built on the machine room roof to take care of the vapor arising from the driers. Mr. Little also designed the roof trusses. Besides the roof monitor, the machine room in addition, eight Swartout Ventilators, to aid in keeping the machine room dry and free of moisture.

The machine room is also equipped with a Ross Engineering Corporation Absorption and Ventilating System.

A three hundred horse power Babcock & Wilcox water tube boiler, equipped with Murphy Stoker and Diamond Glue Blower is also being installed, giving the plant five three-hundred horse power Babcock and Wilcox water tube boilers, all equipped with Murphy stokers and Copes feed water regulators.

A Conveyors Corporation of America steam ash conveyor takes care of the ashes.

Aside from the above, several minor improvements have been made.

This plant is officered by George Little, president; Fred B. Zartman, general manager and treasurer; Lloyd T. Murphy, second vice-president and superintendent.

Germans to Form New Paper Association

[FROM OUR REGULAR CORRESPONDENT]

WASHINGTON, D. C., April 28, 1926—German paper manufacturers have decided to found a new organization to take care of matters affecting the generality of paper using industries, according to a report to the Paper Division of the Department of Commerce from Assistant Trade Commissioner W. E. Nash. He states further that the new organization, which is to be known as the Committee of the Heads, will not concern itself with affairs of individual cartels, but will interest itself in relations of the paper industries with the government, foreign policy, and similar questions. Headquarters will be in Berlin. Printers and publishers, and manufacturers of envelopes and novelties of various sorts will be represented in the new association.

New York Market Review

Office of THE PAPER TRADE JOURNAL,
Wednesday, May 19, 1926.

Conditions in the local paper market are fairly satisfactory for this time of the year. Demand for the various grades is rather quiet in most divisions of the industry but prices show no signs of weakening so far. The sales forces of the leading paper houses are keeping up their efforts and are confidently looking forward to securing a good volume of business before the usual midsummer slump sets in.

The news print market is still in a strong position and prices are being well maintained. The News Print Service Bureau reports that the combined production of the United States and Canada in the first four months of the current year was 14 per cent more than in the same period of the preceding year. Stocks of news print paper at United States mills totalled 19,478 tons at the end of April and at Canadian mills, 12,415 tons, making a combined total of 31,893 tons, which was equivalent o 2.7 days average production.

Demand for the various grades of paper board is still light and the market is a little weaker. The fine paper market is exhibiting a strong tone and tissues are still in good request. Very little change has been noticed in the coarse paper market and the demand for wrapping paper is keeping up very well.

Mechanical Pulp

Trading in the ground wood market during the past week continued along routine lines and the prices on both imported and domestic mechanical pulp were practically unchanged. Offerings in the spot market are rather scarce at present. Shipments on contract are moving in a normal manner. Imported ground wood No. 1, moist, is still selling at from $36 to $38 a ton, ex dock, and dry at from $37 to $40 a ton.

Chemical Pulp

The situation in the chemical pulp market is practically the same as in the preceding week and there have been no further revisions of prices. Due to packing of the ice, navigation in the Baltic has been hampered, thus causing a delay in shipments from that territory. The current demand for chemical pulp is mostly for immediate needs.

Old Rope and Bagging

Domestic old rope is in fair request, but imported old rope is only moving slowly. Prices are practically unaltered. Bagging sales during the past week were mostly confined to small quantities and prices are inclined to fluctuate slightly. Should consumption show any signs of increasing in the near future a great improvement in the market would probably be experienced.

Rags

No radical changes have been reported in the rag market. There has been a limited demand from the paper mills for the higher grades of imported rags and prices are becoming more reasonable. Stocks in the hands of importers are said to be quite sufficient to take care of the prevailing demand. Domestic rags are in fair request with prices showing slight variations.

Waste Paper

Mill demand for the lower grades of waste paper is improving a little, although most of the orders are for small quantities. A better sentiment is being experienced for mixed paper and folded news. The request for old kraft paper is below normal but this condition is felt to be only temporary.

Twine

Trading in the twine market has mostly been along routine lines but some improvement is expected in the near future if the excellent demand which prevails for wrapping paper should continue for any time. Many observers of the market express the opinion that prices at present are too low and that there will be an upward movement in the near future.

File Motion to Quash Mr. Willson's Suit

[FROM OUR REGULAR CORRESPONDENT]

DAYTON, Ohio, May 10, 1926.—Attorney General Crabbe has filed, on behalf of the State of Ohio, a motion to quash the suit instituted by Sidney Willson, receiver of the American Writing Paper Company, Excello, Ohio, to compel annullment of a lease of Miami and Erie canal water power rights formerly held by the paper company to Goudie and Johnson, of Middletown. Mr. Willson's suit had been filed in the United States court and the attorney general's motion also was filed in the same tribunal.

The power rights of the M. & E. canal at Excello are involved. The receiver charged that the paper company obtained a 30-year lease without the privilege of renewal and that the state department of public works had no right to cancel the lease for nonpayment of rent without giving the company's receiver due notice.

Mr. Willson, the auxiliary receiver, resides in Holyoke, Mass. The attorney general's motion to quash service contended a suit cannot be maintained against a state by the citizen of another state.

To Ask for 40 Hour Week in Holyoke

[FROM OUR REGULAR CORRESPONDENT]

HOLYOKE, Mass., May 17, 1926.—Holyoke paper manufacturers and those in this vicinity face the probability of a demand from Eagle Lodge Papermakers for a 40-hour week and increase in wages to $1 an hour. President W. R. Smith, head of the International Brotherhood of Papermakers addressed the local lodge Sunday and it was voted to make this demand on the manufacturers at an early date.

The plan is to work five days a week of eight hours each which according to President Smith, will tend to stabilize the paper industry in this section. The members of Eagle lodge figure that this would tend to assure the members $40 a week.

Organizer Barry will come to Holyoke shortly to assist in conducting negotiations with the manufacturers.

Paper Specifications Committee to Meet Early

[FROM OUR REGULAR CORRESPONDENT]

WASHINGTON, D. C., May 19, 1926.—The Joint Congressional Committee on Printing has directed the Paper Specifications Committee for drawing up specifications for the paper for the Government Printing Office to meet so that a report can be made to the Joint Committee on or before December 7. It is understood that the Specifications Committee will begin its meetings early this summer and that some drastic changes will be made in the paper schedule for next year.

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Miscellaneous Markets

Office of THE PAPER TRADE JOURNAL,
Wednesday, May 19, 1926.

Affected to some extent by the labor difficulties in England, the local chemical market exhibited a strong tendency during the past week. Possible curtailments of shipments from abroad may lead to a firmer market for industrial chemicals shortly, in the opinion of many observers. Paper makers' chemicals are in excellent demand for this season of the year and manufacturers are reported to be receiving a satisfactory volume of inquiries for future business. Contract withdrawals are proceeding in a normal manner and, although competition for desirable orders is still keen, prices are being well maintained.

BLANC FIXE.—The blanc fixe market is practically unchanged. Stocks are reported to be limited and the recently quoted prices are holding up very well. Shipments on contract are moving at a steady pace. The pulp is selling at $56 a ton, in bulk, and the powder at from 4 to 4½ cents a pound, at works.

BLEACHING POWDER.—The bleaching powder market remains in a strong position. Contract withdrawals are being well maintained. Offerings in the spot market are light and prices continue to rule firm. Bleaching powder is still quoted at from $2 to $2.40 per 100 pounds, in large drums, at works, according to quantity.

CAUSTIC SODA.—Trading in the caustic soda market continued along routine lines. Shipments on contract have been larger than anticipated so far this month. Prices are generally holding up well and there has been less talk of concessions than for some time. Quotations on caustic soda range from $3.10 to $3.15 per 100 pounds, at works. Spot car lots are selling at from $3.20 to $3.25 per 100 pounds.

CASEIN.—Demand for casein is persistent and the market is very strong, stocks being scarce and prices a little higher. It is reported that consumers are having difficulty in securing sufficient supplies to fill their requirements. Imported casein is now quoted at 18½ cents a pound, in bags, while domestic casein is selling at from 17½ to 18¼ cents a pound.

CHINA CLAY.—Domestic and imported china clay are in good demand at present. Contract shipments are proceeding at a satisfactory pace. Prices remain unaltered at the recently quoted basis. Imported china clay is still quoted at from $13 to $22 a ton, in bulk, ship side. Domestic washed clay is selling at from $8 to $9 a ton, at mine, and pulverized at $10 a ton.

CHLORINE.—Steadiness prevails in the chlorine market and the consumption remains heavy enough to prevent undue accumulations in the hands of the manufacturers. Prices are unchanged. The quotation on chlorine is still 4 cents a pound, in tanks, or multi-unit cars, at works, on contract orders. The spot quotation is half a cent higher.

ROSIN.—More interest is being taken in rosin and prices have advanced sharply. The demand from consumers, which had fallen off, is expanding, and the future outlook is much brighter. At the naval stores, the grades of rosin used in the paper mills are now being quoted at from $11 to $11.85 per 280 pounds, ship side, in barrels.

SALT CAKE.—Demand for salt cake is more active. Inquiries regarding future business are being received by the manufacturers in an ever-growing volume. Contract withdrawals are being maintained in a normal manner. Prices on the whole rule very firm. Salt cake is still quoted at from $17 to $20 a ton, in bulk, at works.

SODA ASH.—The tone of the soda ash market remains steady. Shipments so far this month have been well up to the average. The spot market has been moderately active and no changes have been reported in prices. Contract quotations, in car lots, at works, per 100 pounds, range as follows: in bulk, $1.25; in bags, $1.38; and in barrels, $1.63.

STARCH.—Trading in the starch market during the week has been quite active and prices are holding up very well. Shipments on contract are proceeding at a normal rate for the time of the year. Special paper makers' starch is still quoted at $3.32 per 100 pounds, in bags, and at $3.49 per 100 pounds, in barrels.

SULPHATE OF ALUMINA.—The sulphate of alumina market is steady and contract withdrawals are proceeding regularly. Consumption is reported to be well up to the average. Sulphate of alumina is quoted at from $2 to $2.05 per 100 pounds, for the iron free, in bags, at works, and at from $1.40 to $1.45 for the commercial grades.

SULPHUR.—No further developments were reported in the sulphur market during the week. Consumption continues heavy and prices remain very firm. Sulphur is quoted at from $18 to $19 a ton, in bulk, at mine, and at from $21 to $23 a ton, shipside.

TALC.—There has been little change in conditions in the talc market. The demand for this product is quite normal and prices are holding up to formerly quoted levels. American talc is quoted at from $15 to $18 a ton, at mine. French talc is selling at from $18 to $22 a ton.

Funeral of Archibald P. Ramage

NORTHAMPTON, Mass., May 8, 1926.—The funeral of Archibald P. Ramage, former manufacturer, was held at his Northampton home, Saturday afternoon of last week. The services were conducted by Rev. Dr. Young, pastor of the Unitarian church, and there was a very large attendance, friends coming from Chicago, New York, Hornsville, N. Y., Boston, Fitchburg, Springfield, Waterbury, Conn., Swanton and Sheldon Springs, Vt., and Holyoke.

There were many beautiful floral tributes from his family, his associates, his lodges and his clubs.

The honorary bearers were Ellis B. Currier, Northampton; John P. Rich, Swanton, Vt.; Harry Hughes, New York; E. W. Mantz, New York, Thomas Alder and William Alder, Flatbush, N. Y.; Norman Harrower, Fitchburg; W. J. McLellan, Boston; Charles Proctor, Boston; George C. Gill, Holyoke.

The active pall bearers were: Lawson Ramage, Sheldon Springs, Vt., a brother; Oswald Ramage, Lincoln, N. H., a brother; Robert Ramage, Holyoke, Theodore Ramage, Springfield, brothers of Mrs. Ramage; Charles Heywood, Holyoke; Henry Moir, New York; Herbert Raymond, St. Albans, Vt.; E. R. Lyman, Sheldon Springs, Vt.

The body was taken to the Springfield Crematory for cremation. The commital service was held at Forestdale cemetery.

John B. Rieg Visits in Portland

PORTLAND, Ore., May 6, 1926.—John B. Rieg, president of the Ewing Paper Mills, Ewing, Mass., and vice-president of the Tissue Manufacturing association, has been in Portland, accompanied by his wife. They are touring the country, Mr. Rieg inspecting conditions in paper mills along with the vacation trip.

Mr. Rieg stated that the Northwest in his opinion is the logical place for new paper mill expansion, and he predicts a large growth of the industry in this section in the coming twenty years, especially for news print and the coarser grades of paper that require immense amounts of raw material. He is a strong advocate for reforestation, and in every interview emphasized strongly the great need for attention to this replacement of the forests being so rapidly devastated.

Child Welfare Association Collects Waste Paper

DAYTON, Ohio, May 10, 1926.—The Child Welfare Association of Connersville, Ind., across the border line, has struck upon a novel plan of adding to its treasury. It has just conducted the initial collection of sacks of waste paper and magazines, 300 or more sacks having been distributed over the town.

The money raised from the sale of the paper will be used for welfare work of which Miss Blanche Stoops is director.

A number of Dayton schools, long ago adopted this plan of raising funds for the purchase of pianos and other musical instruments and in aid of various charitable organizations. Thousands of dollars worth of waste paper has been collected in this manner.